

06/21/2010

GUIDELINES
FOR
PENNSYLVANIA SCHOOLS
FOR THE
ADMINISTRATION OF
MEDICATIONS AND EMERGENCY
CARE



PREFACE

Schools are accountable to provide safe, legal, and appropriate care for students. This includes the administration of medications necessary during the school day in order for the student to attend school and take full advantage of his or her educational program.

Significantly more students require medications during the school day than ever before. Many of these medications are controlled substances, requiring special precautions. Some medications are administered via injection, nasal or gastric tubes, ports, or other routes. Over a three year period, the average yearly number of doses of medications administered to students in Pennsylvania schools and reported to the Department of Health via the *Request for Reimbursement and Report of School Health Services* was nearly eight million. This staggering number presents unique challenges for schools and school nurses in safely and effectively administering medications to their student populations, and illustrates the importance for schools to carefully analyze their current practices and update them as needed.

Both federal and state laws apply to medication administration in public schools. School policies should not conflict with these laws, and schools that do follow the requirements of these laws, as well as follow standards of medical and nursing practice and who provide sufficient staffing for safe administration of medications, decrease risk to themselves and students.

The *Guidelines for Pennsylvania Schools for the Administration of Medications and Emergency Care* have been written to assist schools in the development and implementation of appropriate medication administration policies and procedures. The Guidelines summarize state and federal laws governing medication administration, and discuss legal issues in the school setting. Development of school policies and procedures, including medical plans of care where medications are involved, is also included. The role of the Certified School Nurse regarding medication administration is clearly defined, as is the management of medications in the school setting. A wealth of resources, including sample forms, policy implications, and clinical guidance, is included in an extensive Appendix.

The Department of Health has conferred with the Department of Education and the Department of State in the finalization of this document. These guidelines replace any and all previous documents regarding administration of medications in Pennsylvania schools.

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I. INTRODUCTION

Guidelines for Pennsylvania Schools for the Administration of Medications and Emergency Care are issued pursuant to 22 Pa. Code §12.41 (a) which requires school entities (defined as local public education providers, for example, public schools, charter schools, cyber-charter schools, area vocational-technical schools or intermediate units) to “...prepare a written plan for the implementation of a comprehensive and integrated K-12 program of student services based on the needs of its students. The plan must include policies and procedures for emergency care and administration of medication and treatment, under The Controlled Substance, Drug, Device and Cosmetic Act (35 P.S. §§ 780 - 101—780 - 144) and guidelines issued by the Department of Health.” The purpose of the guidelines is to help Pennsylvania schools ensure the safe and proper administration of medications to students.

Using these guidelines, school officials, school nurses, educational personnel, health professionals, and parent(s)/guardian(s) can work together to develop individual school district policies and procedures. Medication policies and procedures must be consistent with state laws and regulations and with the standards of nursing and medical practice.

II. STATE AND FEDERAL LAWS PERTINENT TO MEDICATION ADMINISTRATION IN THE SCHOOL SETTING

School administrators, certified school nurses (CSN), licensed registered nurses (RN) and licensed practical nurses (LPN) need to be cognizant of state and federal laws and regulations that govern the practice of medical professionals and the administration of medications in the school setting.

A. Federal Laws

Two Federal laws affirm that students who need health services, including medication administration, in order to remain in school and learn, must be accommodated.

1. Rehabilitation Act of 1973

Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. §794 (a), prohibits schools that receive federal funds from discriminating against individuals who qualify under the law’s definition of “handicapped.” Schools must provide individuals with disabilities with “access” to their buildings, programs and services. A child with a disability is broadly defined under the law and includes a child with a physical or mental health impairment that “substantially interferes with a major life function.” School nurses will often participate in identification of individuals with a disability and in preparation of a plan for that individual. (See V, Medical Plans of Care, for more information.)

In Pennsylvania, Chapter 15 of Title 22 of the regulations of the State Board of Education addresses the responsibility of school districts to comply with the requirements of Section 504 of the Rehabilitation Act of 1973. (See Basic Education

Circular, *Implementation of Chapter 15*, 22 Pa. Code Chapter 15; Date of issue: July 1, 1999; Date of expiration: June 30, 2004,
<http://www.pde.state.pa.us/k12/cwp/view.asp?A=11&Q=67462>.)

2. Individuals with Disabilities Education Act (IDEA)

The Individuals with Disabilities Education Act (IDEA) provides the standards for distribution of federal funds to states that provide a “free and appropriate education” in the “least restrictive environment” to students who qualify as disabled under the law. A free and appropriate education means special education and “related services” provided at public expense, under public supervision and direction. Related services include: assistive technology and devices; counseling services; medical services for evaluation purposes; occupational therapy; physical therapy, psychological services, rehabilitation services; social work services; speech language pathology; and school health services. Special education and related services must be documented in an individualized education plan (IEP). (See V, Medical Plans of Care, for more information.)

In Pennsylvania, Chapter 14 of Title 22 of the regulations of the State Board of Education addresses the responsibility of school districts to comply with the requirements of the Individuals with Disabilities Education Act. (See Basic Education Circular, *Special Education Compliance*, 22 Pa. Code Chapter 14 §14.102.(a)(4); Date of issue: June 5, 2002; Date of expiration: June 30, 2007,
<http://www.pde.state.pa.us/k12/cwp/view.asp?A=11&Q=67427>.)

B. State Laws

In Pennsylvania, all medical professionals are licensed, and their professions are regulated by the Department of State. The Department of State has individual boards to oversee each profession (i.e. State Board of Pharmacy, State Board of Medicine and State Board of Nursing).

1. Pharmacy Act

The Pharmacy Act, 63 P.S. §§ 390-1 – 390-13, gives the State Board of Pharmacy the authority to regulate the practice of pharmacy, 63 P.S. § 390-6 (k) (1). The Board licenses pharmacists, 63 P.S. § 390-3 and issues a permit to conduct a pharmacy, 63 P.S. § 390-4. Issuance of a license or a permit is subject to mandatory criteria. The Pharmacy Act makes it unlawful for “any person not duly licensed as a pharmacist...to engage in the practice of pharmacy...” 63 P.S. § 390-8 (2). The “practice of pharmacy” is defined as “the practice of that profession concerned with the art and science of the evaluation of prescription orders and the preparing, compounding and dispensing of drugs and devices...” 63 P.S. § 390-2 (11). The Pharmacy Act defines “dispense” or “dispensing” as “the preparation of a prescription or non-prescription drug in a suitable container appropriately labeled for

subsequent administration to or use by a patient or other individual entitled to receive the drug.”

Taking medication from the original container and placing it in another container or envelope and relabeling it for administration by school personnel could be considered dispensing and is not within the scope of nursing practice.

2. Medical Practice Act

The Medical Practice Act, 63 P.S. §§422.1 - 422.51a, prohibits the unauthorized practice of medicine and surgery. See 63 P.S. §422.10. “Medicine and surgery” is defined as “the art and science of which the objectives are the cure of diseases and the preservation of the health of a man, including the practice of the healing arts with or without drugs, except healing by spiritual means or prayer.” 63 P.S. §422.2 “Healing arts” is defined as “[t]he science and skill of diagnosis and treatment in any manner whatsoever of disease or any ailment of the human body.” 63 P.S. §422.2

3. Professional Nursing Law

The Professional Nursing Law, 63 P.S. §§211 - 225.5, defines the “Practice of Professional Nursing” as:

diagnosing and treating human responses to actual or potential health problems through such services as casefinding, health teaching, health counseling, and provision of care supportive to or restorative of life and well-being, and executing medical regimens as prescribed by a licensed physician or dentist. The foregoing shall not be deemed to include acts of medical diagnosis or prescription of medical therapeutic or corrective measures, except as performed by a certified registered nurse practitioner acting in accordance with rules and regulations promulgated by the Board.

Regulations promulgated pursuant to the Professional Nursing Law permit a licensed registered nurse (RN) to “administer a drug ordered for a patient in the dosage and manner prescribed” 49 Pa Code §21.14 (a).

4. Practical Nurse Law

Under the Practical Nurse Law, 63 P.S. §§ 651 – 667.8:

[t]he ‘practice of practical nursing’ means the performance of selected nursing acts in the care of the ill, injured or infirm under the direction of a licensed professional nurse, a licensed physician or a licensed dentist which do not require the specialized skill, judgment and knowledge required in professional nursing. 63 P.S. § 652

A licensed practical nurse (LPN) may not function independently in the school setting. The CSN must provide medical oversight to the LPN. Medical oversight does not necessarily mean direct, line-of-sight supervision, but should include, at a minimum, periodic and regular communication.

State Board of Nursing regulations at 49 Pa. Code § 21.145 (a) further define the scope of practical nursing and state that: “[t]he LPN is prepared to function as a member of the health care team...” and “participates in the planning, implementation, and evaluation of nursing care in settings where nursing takes place.”

An LPN may administer medications as prescribed by law or regulation. 49 Pa Code §21.145 (b) states: “The LPN administers medication and carries out therapeutic treatment ordered for the patient...”

III. LEGAL ISSUES IN MEDICATION ADMINISTRATION

A. Standards of Nursing Practice

With regard to RNs, the State Board of Nursing “recognizes standards of practice and professional codes of behavior, as developed by appropriate nursing associations, as the criteria for assuring safe and effective practice.” 49 Pa. Code § 21.11 (d). With regard to LPNs, the Board “recognizes codes of behavior as developed by appropriate practical nursing associations as the criteria for assuring safe and effective practice.” 49 Pa. Code §21.145(d). The American Nurses Association (ANA), the National Association of School Nurses (NASN), and Pennsylvania Association of School Nurses and Practitioners (PASNAP) are widely recognized as leaders for best practice standards in school nursing. (See Appendix A and B.)

A nurse should always practice prudently within the parameters of his or her nursing practice act. Standards of nursing care provide guidelines that safeguard the patient from incompetent nursing care. Nurses performing a treatment or administering a medication that requires skills and knowledge beyond his or her competency level can be viewed as negligent or demonstrating unprofessional conduct. (See Appendix A and B.) State Board of Nursing regulations applicable to RNs state, “The registered nurse may not engage in areas of highly specialized practice without adequate knowledge of and skills in the practice areas involved.” 49 Pa Code § 21.11 (c). The State Board of Nursing has the authority to discipline a nurse. The Board may suspend or revoke nursing licenses for cause. 49 Pa Code § 21.2 (d). If a registered nurse fails to comply with an obligation or prohibition, they are subject to disciplinary and corrective measures. 49 Pa Code § 21.18 (c).

In accordance with standard nursing practice, the nurse may refuse to administer or permit the administration of a medication, which based on his/her assessment and professional judgment, has the potential to be harmful, dangerous or inappropriate. (See Appendix A.) In these cases, the nurse (CSN, RN or LPN) must notify the parent(s)/guardian(s) and licensed prescriber immediately and explain the reason for refusal. State regulations require that “a registered nurse shall act to safeguard the patient

from the incompetent, abusive or illegal practice of any individual.” 49 Pa Code § 21.18 (a) (3). The same language is mirrored in state regulations governing the practice of practical nursing. 49 Pa Code § 21.148 (a) (3). State regulations governing the practice of practical nursing also state that “the LPN shall question any order which is perceived as unsafe or contraindicated for the patient or which is not clear and shall raise the issue with the ordering practitioner. If the ordering practitioner is not available, the LPN shall raise the issue with a registered nurse or other responsible person in a manner consistent with the protocols or policies of the facility.” 49 Pa Code § 21.145 (b) (3).

B. Delegation of Task of Administration of Medication

Neither the Professional Nursing Law nor the Practical Nurse Law permits delegation of nursing functions. When the State Board of Nursing attempted to promulgate a regulation allowing a registered nurse to delegate certain nursing functions, including administration of medications, the proposed regulation was disapproved on the basis that the Board was exceeding its statutory authority. Accordingly, a certified school nurse or other licensed personnel (RN, LPN) cannot lawfully delegate the nursing function of medication administration to the principal, teacher, or administrative personnel.

Pertinent Department of Education Certification and Staffing Policy Guidelines (CSPGs) conform to state law. CSPGs clarify how schools are expected to comply with certification and staffing laws, regulations, court decisions, opinions of the Attorney General, administrative agency policy and administrative decisions of appeals taken from local education agency hearings. CSPG No. 101, applicable to paraprofessionals, states that “paraprofessionals serving as health room aides or other non-professional school district employees shall not be directed to engage in health-related activities reserved exclusively for licensed professionals and controlled by the Nurse Practice Act or other medically related laws.” CSPG No. 95, applicable to a K-12 Principal, states that a principal holding a valid certificate is qualified to perform “supervision and direction of certified and non-certified staff persons required for school operation *exclusive of directing health services controlled by the Nurse Practice Act.*” (emphasis added).

Section 13 – 1317 of the Public School Code addressing the doctrine of “in loco parentis” limits the authority of the teacher, vice-principal and principal to matters involving the conduct and behavior of the child, and does not extend that authority to other areas. 24 P.S. § 13-1317. School districts may not assign the medication administration function to the school administrators, teachers, or other personnel under the doctrine of “in loco parentis.”

There are other reasons, in addition to legal constraints, not to permit administration of medication by someone who has no training. The primary reason is that administering medications requires the judgment and assessment skills of a licensed nurse. Even in those states where delegation is permitted, parameters for delegation do not permit delegation of the functions of assessment, evaluation and nursing judgment. Judgment and assessment skills are used to determine, for example, whether to administer or withhold a medication, or to consult a student’s primary care provider. Consider the

situation when a student reports to the nurse to receive a second dose of an antibiotic and presents with a generalized rash. After assessment, a nurse may decide to withhold the dose because the nurse suspects the student may be having an allergic reaction to the medication. The nurse would then consult with the student's primary care provider to determine the plan of care. For many students with chronic health conditions, assessments may be necessary with each visit to the office for medication. School administrators, teachers and other unlicensed school personnel do not have the training to conduct the type of assessment illustrated by the above example.

C. Health Room Staffing

Article XIV School Health Services of the Pennsylvania Public School Code, §14-1402 (a.1), states "Every child of school age shall be provided with school nurse services; Provided that the number of pupils under the case of each school nurse shall not exceed one thousand five hundred (1,500)." Department of Health regulations at 28 Pa Code §23.51 further clarify the statutory language by stating "A child in private, parochial and public schools shall be provided with school nurse services in the school which the child attends." Furthermore, §23.53 identifies the factors schools must consider when determining CSN caseload/assignments: "The school administrator, in determining the number of pupils to be served by a school nurse, shall consider the number of schools, distance between schools, travel difficulties and special health needs of the area."

In the best interest of safe and quality health care for students, the ideal situation is a full-time CSN in every school building. Short of the ideal, best practice would be to have a licensed professional (CSN, RN, LPN) in every building; where an RN or LPN is utilized, oversight by a CSN is necessary.

When neither of these staffing arrangements exists, it can present challenges for schools to provide safe, appropriate and timely care to students. These challenges, which have the potential to increase a school's risk of liability, could include:

- Unlicensed school staff may attempt to meet healthcare needs of students without the proper education, training, and competency.
- Unlicensed school staff may be required to administer numerous medications to many students within a small window of time while continuing to perform their usual duties; this is typically done independent of nursing oversight.
- Medication errors (missed doses, wrong student, wrong time, duplicate dosing, and wrong dose) may increase. Research has shown that medication errors increase when medications are administered by unlicensed school personnel.
- Treatment for illness, injury and chronic care may be missed or delayed.
- Assessment and treatment for adverse medication reactions may be missed or delayed.
- Students with special healthcare needs may receive a substandard quality of care, leading to increased parental complaints and an increased risk of violation of federal and state law.

- Controlled substances may not be monitored and secured adequately to prevent theft.
- Documentation may be missing or incomplete.

Schools need to use sound judgment and creativity in finding the proper balance between meeting students' healthcare needs and budgetary limitations, while respecting federal and state statutory and regulatory intent. Options to consider include:

- Develop or realign caseload assignments for the CSN(s) taking into consideration the special healthcare needs of students.
- Hire licensed supplemental staff (RN, LPN) to assist the CSN in serving the needs of students.
- Collaborate with parents and healthcare providers to consider adjusting dosage time(s) to minimize administration at school.
- Utilize licensed (RN, LPN) paraeducators (personal care aides) for children with special healthcare needs.
- Maintain substitute pools for both CSNs and supplemental staff (RN, LPN) for coverage during absences.

The Department of Health has both statutory and regulatory responsibilities regarding the school health program. Oversight is accomplished through the Division of School Health. Consultation and technical assistance is available to schools regarding all health issues, including nurse staffing and medication administration. For assistance, call (717)787-2390 or e-mail c-paschool@state.pa.us. Additionally, assistance is available from the Department's School Health Consultants located in each of its six Community Health District offices. Contact information can be found at: <http://www.dsf.health.state.pa.us/health/lib/health/309SHConsultant4-7-09.pdf>.

D. Confidentiality

Parents and students have an expectation of privacy where the students' health information is concerned which is supported by ethical and legal considerations. Legal sources of privacy and confidentiality protections include the U.S. and State Constitutions, federal and state laws, and case law. The Public School Code, at 24 P.S. § 14 - 1409, states that all health records shall be confidential, and their contents may be divulged only when necessary for the health of the child or at the request of the parent or guardian to a physician. Regulations promulgated pursuant to the Nurse Practice Act, addressing standards of nursing conduct, require a registered nurse to safeguard the patient's dignity, the right to privacy and the confidentiality of patient information. 49 Pa. Code § 21.18.

The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects privacy interests of parents in their children's education records, defined to include school health records, and prevents an educational institution from having a policy or practice of disclosing the education records of students, or personally identifiable information contained in education records, without the written consent of the parent.

Under FERPA, there are a number of specific statutory exceptions to the general rule against nonconsensual disclosure that are set forth at U.S.C. § 1232g (b) - (j) and 34 C.F.R. § 99.31. FERPA provides for disclosure of confidential information about individual students in “health and safety emergencies.” In general, “health and safety emergencies” refers to situations of immediate and serious danger, such as critical illness, serious accident, or threatened homicide or suicide. If the situation is serious enough to telephone for emergency services (e.g. call 9-1-1), release of sufficient student information to assist in emergency treatment is appropriate. Such release may be made only to “appropriate parties,” and may be made only if knowledge of the specific information is “necessary to protect the health or safety of the student or other individuals.”

FERPA also allows disclosure of personally identifiable information from an education record of a student without a parent’s/guardian’s consent if the disclosure is to other school officials, including teachers and administrators, within the agency or institution, whom the agency or institution has determined have a “legitimate educational interest” in the information. The school district must issue annual notice of rights under FERPA to parents/guardians and to students over age 18 which includes information regarding criteria used by the school for determining which school staff members have been designated as “school officials” and what is “legitimate educational interest” for staff access to education records. Guidance from the Family Policy Compliance Office of the U.S. Department of Education, which has responsibility for enforcing the requirements of FERPA, instructs schools to limit access to health records and information contained in health records to those who need to know to benefit the student and who have the expertise to understand and interpret the health information in relation to school and education needs.

IV. POLICIES AND PROCEDURES DEVELOPMENT

Parent(s)/guardian(s) should administer medications at home whenever possible and should collaborate with their primary care provider to establish medication schedules that minimize administration at school. When a medication must be administered during school hours, the school district should have clearly written policies and procedures that will provide direction and guidance for medication administration to students, which are in accordance with state laws and regulations.

Recommendations for developing medication policies and procedures:

- Policies should include the following: purpose, authority, definitions, responsible personnel and the course of action.
- The CSN should be an integral part in the development of health policy and procedures within the school system.
- Procedures should include the following: definitions, requirements, specific steps, expected outcomes, precautions, responsibilities of personnel and documentation.

- Procedures should specify the responsible personnel and the methods by which the medication administration policies will be disseminated among parents/guardians, students and faculty.
- Procedures should ensure the positive identification of the student who receives the medication.
- Procedures should indicate how the school communicates significant findings or observations regarding individual students to parent(s)/guardian(s) and to the licensed prescriber, as appropriate. These findings/observations may include medication effectiveness, adverse reactions, other harmful effects or variances (deviations from the standard of care).
- All policies and procedures should carry the date they were established and the date(s) they were revised.

Note: See Appendix C for an overview and guidance in developing policies and procedures pertaining to some of the more common conditions requiring medications during school hours.

The document(s) should be reviewed at least every two years by the school district and revised as needed. Review should begin with a core committee consisting of the school nurse(s), physician and dentist. Other personnel on this committee may include administrators and members of the School Health Advisory Committee, if one has been established. School solicitors should review and school boards should approve policies.

V. MEDICAL PLANS OF CARE

An increasing number of students with complex healthcare needs are attending schools across the Commonwealth. Federal law, summarized in Section II A, requires the accommodation of students with healthcare needs in order to maximize their school attendance and to facilitate their highest level of functioning and learning. The CSN is the medical expert within the school setting who can work with the family, student and healthcare providers to determine what accommodations are required. The CSN collaborates with school administration, faculty and staff to develop plans that best meet the student's needs, and serve as an advocate for the student. These needs are best communicated through written plans of care. There are several types, some of which are required by professional standards of practice, such as the Individualized Healthcare Plan (IHP) and Emergency Care Plan (ECP); others are required by federal laws, such as a Chapter 15 Service Agreement (504) and Individualized Education Plan (IEP) with medical component. Each of these plans is discussed in greater detail below.

A. Individualized Healthcare Plan (IHP)

The IHP is required by professional standards of practice and uses the nursing process (assessment, diagnosis, planning, implementation and evaluation) to determine a plan of action that meets the health care needs of a student during the school day. This plan, initiated by the CSN, provides written directions for school health personnel to follow in meeting the individual student's health care needs. While parental involvement is not

required, it is strongly encouraged. An IHP may be part of a Chapter 15 Service Agreement (504) or IEP with medical component. (See Appendix D.1. and D.2 for an example of an IHP.)

B. Emergency Care Plan (ECP)

The ECP is required by professional standards of practice and provides steps for school personnel in dealing with a life threatening or seriously harmful health situation for an individual student. This plan is initiated by the CSN and may be part of the IHP, Chapter 15 Service Agreement (504) or IEP with medical component. While parental involvement is not required, it is strongly encouraged. (See Appendix E.1., E.2., and E.3 for an example of an ECP.)

C. Chapter 15 Service Agreement (504)

The service agreement is required by 22 Pa. Code, Chapter 15, Protected Handicapped Students, which implements Section 504 of the Rehabilitation Act of 1973. Schools are required to provide necessary accommodations for qualifying students to have an equal opportunity to participate in the school program. The service agreement outlines how the school will make these accommodations. A parent or guardian has the right to initiate a service agreement and an agreement is usually initiated this way or through discussions with the CSN, a teacher or administrator. Parental involvement is required. (See Appendix F for an example of a Chapter 15 Service Agreement (504)).

According to 22 Pa. Code §15.8, “Parents may file written requests for assistance with the Department of Education if one or both of the following apply:

- The school district is not providing the related aids, services, and accommodations specified in the student’s service agreement;
- The school district failed to comply with the procedures in Chapter 15 or 504.”

In Pennsylvania, Chapter 15 of Title 22 of the regulations of the State Board of Education addresses the responsibility of school districts to comply with the requirements of Section 504 of the Rehabilitation Act of 1973. (See Basic Education Circular, *Implementation of Chapter 15*, 22 Pa. Code Chapter 15 Date of issue: July 1, 1999; Date of expiration: June 30, 2004, <http://www.pde.state.pa.us/k12/cwp/view.asp?A=11&Q=67462>.)

D. Individualized Education Plan (IEP) with Medical Component

The IEP is required by the IDEA and 22 PA Code, Chapter 14, Special Education Services and Programs, for qualifying students. This written plan is developed by an IEP team for students in need of special education. This plan outlines how the school will provide a “free and appropriate education in the least restrictive environment” and is

usually initiated by the teacher or administrator. Parental involvement is required. If the IEP includes a medical component, or a medical component is being considered, the CSN must be included as part of the IEP team or serve as a consultant to the team in determining the student's needs. Schools are required to provide aides, services or other accommodations needed for the student to remain in school and learn.

In Pennsylvania, Chapter 14 of Title 22 of the regulations of the State Board of Education addresses the responsibility of school districts to comply with the requirements of the Individuals with Disabilities Education Act. (See Basic Education Circular, *Special Education Compliance*, 22 Pa. Code Chapter 14 §14.102 (a)(4) Date of issue: June 5, 2002; Date of expiration: June 30, 2007, <http://www.pde.state.pa.us/k12/cwp/view.asp?A=11&Q=67427>.)

VI. ROLE OF THE CERTIFIED SCHOOL NURSE (CSN)

The CSN provides for the safe administration of medications in the school setting. With regard to medication administration, the CSN:

- Adheres to nursing standards and the appropriate nurse practice act;
- Helps to assure that the school district has comprehensive medication policies and procedures that are communicated to and understood by staff, students, and parent(s)/guardian(s);
- Assesses the student's health needs and develops an Individualized Healthcare Plan (IHP) as appropriate (See Section V- Medical Plans of Care.);
- Participates in developing an Individual Education Plan (IEP), Chapter 15 Service Agreement (504), and in multidisciplinary meetings for students with special health care needs;
- Provides direction and oversight to other members of the school or district's health care team;
- Provides education to staff on policies, procedures and treatment plans that are necessary for the student's attendance in school;
- Administers medications to students as ordered by a licensed prescriber (See Appendix G.);
- Assures ongoing communication with students, parent(s)/guardian(s), care providers and appropriate school staff;
- Ensures proper documentation of medication records;
- Conducts periodic evaluation of policies and procedures and makes recommendations for changes as appropriate;
- Maintains professional knowledge through ongoing educational opportunities;
- Maintains a current health resource library of reference materials such as the Physician's Desk Reference (PDR) or a nursing medication handbook.

VII. MEDICATION MANAGEMENT

A. Individual Orders

1. The CSN should be familiar with current laws and regulations governing health professionals' scope of practice pertaining to prescribing medication in the Commonwealth. In addition to licensed physicians, podiatrists, dentists and optometrists, certified registered nurse practitioners (CRNP) and physician's assistants (PA) may have prescriptive authority, if approved by the Department of State. (See Appendix G.)
2. The CSN must ensure that, for each medication to be administered there is a medication order from a licensed prescriber. A prescription provides instruction to the pharmacist for dispensing the medication, while a medication order provides instruction to the nurse for administration of the medication. Medication orders are required for both prescription as well as over-the-counter medications and herbal remedies. Regulations promulgated pursuant to the Professional Nursing Law permit a licensed RN to "administer a drug ordered for a patient in the dosage and manner prescribed." 49 Pa Code 21.14(a). An LPN administers medications and carries out the therapeutic treatment ordered for the patient. 49 Pa Code §21.145 (b). (See Appendix H.)
 - a. *Written, faxed, or electronic orders:* Medication orders from a licensed prescriber should be provided to the school nurse in writing, with an original signature or an authorized electronic signature. These orders can be accepted from a licensed prescriber on his/her letterhead, prescription pad or on a form provided by the school for this purpose and signed and dated by a licensed prescriber. (See Appendix I.)
 - b. *Oral (Verbal) orders:* There are circumstances, such as an immediate change in medication dosage, when oral orders may need to be used, until a written order can be obtained. A physician assistant, certified registered nurse practitioner and a registered nurse may accept these types of orders. Also, a licensed practical nurse may accept a verbal order for medication under the conditions set forth at 49 Pa. Code § 21.145 (2) – (5). (See Appendix H.) Ideally, a written order should be received within five (5) school days.
3. In accordance with standard medical practice, a medication order from a licensed prescriber should contain:
 - Student's name;
 - Name and signature of the licensed prescriber and phone number;
 - Name of the medication;
 - Route and dosage of medication (See Appendix J for abbreviations and measurement equivalents);
 - Frequency and time of medication administration;
 - Date of the order and discontinuation date;
 - Specific directions for administration, if necessary.

The CSN may want to obtain from a licensed prescriber the following additional information, if appropriate:

- Any specific side effects, contraindications and adverse reactions to be observed;
- Any other medications (prescribed or over-the-counter) being taken by the student.

4. All medication orders should be renewed at the beginning of each academic year.

B. Standing Orders

Standing orders are medical directives written by the school's physician. These orders may authorize administration of specific over-the-counter (OTC) medications such as acetaminophen or antacids and/or emergency medications such as epinephrine (Epi-pen) to students according to a defined protocol. The health team, school physician, school administrator and school board should engage in a thorough discussion of the risks and benefits of having standing orders prior to the adoption of the medication policy. Although parent/guardian approval (consent) is not needed for the administration of medications during a life threatening emergency, consent is required for the administration of over-the-counter medications. Standing orders for OTC and/or emergency medications should be reviewed, updated and signed by the school physician annually. The health office in each school building must have a copy of the signed standing orders on file. School districts that do not include standing orders in the school district's medication policy can still provide services to students who need PRN (as needed) medications by having an individual order for OTC/emergency medications from the student's primary care provider.

C. Parent/Guardian Consent

With the exception of medications administered via standing order during a life threatening emergency, all medications given in the school setting must have a written authorization (consent) from a parent/guardian. (See Appendix I.) The written authorization, renewed at the start of each school year by the parent/guardian, should contain:

- A parent/guardian's printed name, signature and an emergency phone number;
- Approval to have the CSN, or in the absence of the CSN other licensed school health staff (RN, LPN), administer medications;
- A list of all other medications that the student is currently taking (recommended).

D. Over-the-Counter Medications

If a school chooses to administer over-the-counter (OTC) medications, they must be treated as prescribed medications requiring both an order from a licensed prescriber and consent from a parent/guardian. The need for an order from a licensed prescriber can be

accomplished through obtaining a standing order from the school physician (See VII, B, Standing Orders) or an individual order for the student from a licensed prescriber. (See VII, A.2. Individual Orders.)

E. Delivery, Storage, and Disposal of Medications

State and Federal laws place restrictions on the delivery, storage and disposal of certain controlled medications. Schools are advised to treat all medications in the same manner in order to ensure student safety and to reduce the risk of liability.

1. Delivery of Medications

A parent/guardian or a responsible adult designated by the parent/guardian should deliver all medications to the school. The medication must be in the original pharmacy labeled container. (See II, B, 1, Pharmacy Act.) According to 49 Pa Code §27.18(d) (1) – (7), the label must contain:

- Name, address, telephone and federal DEA (Drug Enforcement Administration) number of the pharmacy;
- Patient name;
- Directions for use (dosage, frequency and time of administration, route, special instructions);
- Name and registration number of the licensed prescriber;
- Prescription serial number;
- Date originally filled;
- Name of medication and amount dispensed;
- Controlled substance statement, if applicable.

Medications in plastic bags or containers other than their original pharmacy container are NOT acceptable. The licensed school health personnel (CSN, RN, LPN) receiving any medication should document the quantity of the medication delivered. This documentation should include the date, time, amount of medication and the signatures of the parent/guardian or designated adult delivering the medication and the school health personnel receiving the medication.

2. Storage and Security of Medications

- All medications should be stored in their original pharmacy container. No more than a thirty (30) school day supply for any one medication should be stored at school.
- Effective controls and procedures should be in place to guard against theft and diversion of medications. (See Appendix K.)

- Medications should be kept in a securely locked cabinet used exclusively for medications. All controlled substances must be kept in a locked cabinet. (See Appendix L for Schedule of Controlled Medications.)
- Medications that require refrigeration should be stored and locked in a refrigerator designated for medications ONLY. Food should not be stored in the same refrigerator as medications. If storing vaccines for immunization refer to the package insert for temperature requirements. If there is a question about storage of vaccines, please consult your PA Department of Health District Office and ask for the Immunization Nurse Consultant. (See Appendix M.)
- Access to all medications should be limited to approved personnel such as the CSN, RN, and LPN, except that in life threatening emergencies, designated personnel may have access. The need for emergency medication may require that a student carry the medication on his/her person or that it be easily accessed. (See IX. A., Self-administration of Emergency Medications.)

3. Disposal of Medications

- Contaminated needles or other contaminated sharp materials should not be bent, recapped or removed. Contaminated needles should be placed immediately in a puncture resistant container that is labeled with a fluorescent or orange-red biohazard symbol or in a red container that is closable. (See Appendix N.)
- All discontinued or outdated medications should be returned to the parent/guardian immediately. At the end of each school year, all unused medications should be returned to the parent/guardian. Documentation of disposition should include the date, time, amount of medication, and signatures of the parent/guardian and school personnel. If the parent/guardian does not retrieve the medication at the end of the school year, the licensed personnel (CSN, RN, LPN) and one witness should dispose of the medication and document the disposal.
- Medications should not be disposed down the drain because waste-water treatment facilities are not designed to remove pharmaceutical compounds and they may end up in local waterways, and may eventually be found in drinking water. In guidelines issued in February of 2007, three federal agencies, including the Environmental Protection Agency and the Office of National Drug Control Policy, advised people with leftover medicines to flush them down the drain “only if the accompanying patient information specifically instructs it is safe to do so.” Otherwise, the guidelines recommend disposing of the drugs in the trash (mixed with “an undesirable substance”). The guidelines are available at http://www.whitehousedrugpolicy.gov/publications/pdf/prescrip_disposal.pdf

F. Administration of Medication

Before administering medications, it is essential that the school nurse understand health and disease processes as well as the desired action(s) of the medications being given. See Appendix C for an overview and guidance in developing policies and procedures pertaining to some of the more common conditions requiring medications during school hours. This guidance is important for observing the student for desired responses as well as potential side effects in order to help the licensed prescriber and parent(s)/guardian(s) plan and adjust therapy for each individual student.

1. Preparation of Medication

a. Verify the 5 “Rights” of medication administration:

- Right student
- Right medication
- Right amount/dosage
- Right route
- Right time

b. Check label on medication container to minimize risk for errors when:

- Reaching for the container;
- Immediately prior to pouring medication;
- Returning the container to medicine cabinet.

c. Ensure medications are not left unsupervised.

d. Identify student and when possible have student also check label.

2. Routes of Administration

Nurses working in school settings must be familiar with the various routes of medication administration, and the steps required to correctly and safely perform the procedure in order to ensure the delivery of the medication to the student in the manner prescribed. (See Appendix O for procedures related to specific routes of administration.)

G. Documentation of Medication Administration

1. Individual Student Medication Record

Any medication given during school hours must be documented on an individual student medication record (See Appendix P), which becomes part of the student’s *School Health Record*. Whether records are manually or electronically maintained, the following information should be included:

- Name of student;
- Date and time medication was given;

- Name of medication;
- Dose of medication;
- Route and site of administration;
- Signature of licensed person administering/observing medication being taken;
- In the case of PRN medications, results should also be charted to document whether appropriate results are being obtained.

School health records should include documentation of medication orders, parent/guardian consent, and an individual medication log.

Periodic reports on effects of medications administered should be sent to parent(s)/guardian(s) and/or primary care providers as necessary; the reports may include input from faculty. Some schools prepare monthly reviews; some schools send reports at the mid-grading period. Each district should develop a policy for these reviews.

2. Electronic Records

Advances in computerized technology and concerns about privacy and security of health information have modified the way in which health records are maintained. Although electronic records are not a requirement for the school health room setting, they do provide an efficient and effective record keeping system for school nurses to meet their daily responsibilities.

The following are important points to consider if a school nurse is planning on implementing a computerized system within the school setting:

- Learn computer terminology and basic electronic information processing.
- Identify your specific needs. What information do you want to collect? Research the various computer programs to identify the one that best meets your needs.
- Become familiar with privacy and security provisions such as the Health Insurance Portability and Accountability Act (HIPAA, 1996), which was implemented on April 14, 2003, and the Family Educational Right to Privacy Act (FERPA, 1974). Public and private federally funded schools are covered under FERPA. Private, non-federally funded schools and school-based health clinics are covered under HIPAA.
- To ensure confidentiality, make sure that the computer software has a security system, a means to track errors and changes, a lock down component and a log on code.

H. Medication Variances

Medication variances are deviations from the standard of care. Variances can include: incorrect medication, incorrect student, omitted doses, incorrect doses, and incorrect time of administration, incorrect route of administration and/or incorrect technique in

administration. All variances should be documented and reported to the CSN. The CSN should notify the parent(s)/guardian(s) and building administrator. The CSN should notify the licensed prescriber if there is potential for harm to the student. The student should be assessed by the CSN for untoward effects.

The school district's medication policies should include a procedure and forms for reporting medication variances. (See Appendix Q.) This information should be used in reviewing for quality assurance and for designing corrective action(s), as necessary.

Medications should always be administered within 30 minutes before or after the prescribed time. If there is a medical order for medication, the nurse is responsible to carry out that order. The school medication policy should include plans to address the situation in which a student fails to report for his/her medication and/or refuses to take a medication. If a student fails to report to the health room for medication, efforts should be made to locate and remind the student to take his/her medication. An IHP or 504 Agreement may be indicated for a student who regularly fails to report for his/her medication. The plan should address ways to improve compliance and the student's understanding of his/her diagnosis. A student who refuses to take medication should not be physically forced to do so. In this situation, a plan should be developed with the parent(s)/guardian(s), student, administrators and other school staff, as needed, to address the problem.

VIII. FIELD TRIPS, BEFORE/AFTER SCHOOL AND SUMMER PROGRAMS AND ACTIVITIES

Field trips, before/after school and summer programs and activities present several challenges to the school health program. Schools must be cognizant of the fact that regardless of setting or time of the year, all federal and state laws and regulations, and clinical standards that govern the practice of safe medication administration continue to apply. For example, taking medication from the original container and placing it in another container or envelope and re-labeling it for administration by school personnel could be considered dispensing. Dispensing medications is not within the scope of nursing practice.

Section 504 of the Rehabilitation Act of 1973 has been interpreted to require that students with disabilities have access to non-academic services such as field trips and cannot be denied access to school programs and activities on the basis of that disability. When participating in school-sponsored programs and activities, students are eligible to receive the same needed service that they receive during the regular school day. This requires planning in advance, especially if the program/activity includes overnight stays or travel out of state. The school may not request that a parent/guardian sign a waiver of liability as a condition to administer medication during these events. In the case of a school trip, the school may ask a parent to accompany his or her child but cannot require the parent to do so. Administration of medications is a support service that must be provided.

Given the significant increase in students with special health care needs, including medication administration, school district policy should require that planning for school-sponsored activities is: 1) initiated before school starts or early in the year; and 2) the product of collaboration between school administrators, teachers and nurses, as well as families, school medical advisors, and community health care providers, as appropriate.

Schools need to use professional judgment and creativity in finding the proper balance between requirements for safety and the personal risk-taking that is reasonable in order for the student to participate. Some considerations when planning for medication administration during school-sponsored programs and activities include the following:

- Consider assigning school health staff to be available, for example the CSN or a licensed supplemental staff person (RN, LPN). (If the activity occurs during school hours, plans need to be in place to provide coverage for the staff person's regular duties.)
- Utilize a licensed person from the school district's substitute list.
- Contract with a credible agency which provides temporary nursing services.
- Utilize licensed volunteers via formal agreement that delineates responsibilities of both the school and the individual.
- Address with parent/guardian the possibility of obtaining from the licensed prescriber a temporary order to change the time of dose.
- Arrange for medications to be provided in an original, labeled container and given according to school district policy. Have parent/guardian ask the pharmacist to provide a properly labeled, original container with only the amount of medication that will be needed. (See Section II, State and Federal Laws Pertinent to Medication Administration in the School Setting, Pharmacy Act.)
- Ensure security procedures are in place for the handling of all medications.

IX. EMERGENCY MEDICATIONS

All schools should develop and have policies in place that address health emergencies. These policies should incorporate applicable laws pertaining to emergency response. State law addressing medical good Samaritan civil immunity (42 Pa. C.S. §8331) states that health care practitioners rendering emergency care "shall not be liable for any civil damages as a result of any acts or omissions ... in rendering the emergency care, except any acts or omissions intentionally designed to harm or any grossly negligent acts or omissions which result in harm to the person receiving emergency care." (See Appendix R for complete statutory language at 42 Pa C.S. § 8331.)

Under a similar provision addressing non-medical good Samaritan civil immunity, "any person who renders emergency care, first aid or rescue at the scene of an emergency, or moves the person receiving such care, first aid or rescue..., shall not be liable to such person for any civil damages as a result of any acts or omissions...except any acts or omissions intentionally designed to harm or any grossly negligent acts or omissions which result in harm..." This immunity is only applicable if the lay rescuer holds "a current certificate evidencing the successful completion of a course in first aid, advance life saving

or basic life support...” 42 Pa. C.S. § 8332. (See Appendix R for complete statutory language at 42 Pa C.S. § 8332.)

Under 42 Pa. C.S. § 8337.1, “an officer or employee of a school who in good faith believes that a student needs emergency care, first aid or rescue and who provides such emergency care, first aid or rescue...or who removes the student...shall be immune from civil liability as a result of any acts or omissions by the officer or employee, except any acts or omissions intentionally designed to seriously harm or any grossly negligent acts or omissions which result in serious bodily harm...” The law defines “officer or employee of a school” as “a school director, principal, superintendent, teacher, guidance counselor, support staff member or other educational or medical employee employed in a day or residential school which provides preschool, kindergarten, elementary or secondary education in this Commonwealth at either a public or nonpublic school.” (See Appendix R for complete statutory language at 42 Pa C.S. § 8337.1.)

In true emergency situations, the school should do all in its power to render emergency care. To prepare for emergencies that can be reasonably anticipated in the student population, the school should have written first aid policies and emergency management practices in place. These policies and procedures should reflect staff responsibilities and district expectations for staff actions in an emergency situation, including identifying specially trained and designated individuals who, in addition to the nurse, will render first aid. For students who are identified with a potential to experience a health emergency, an Individualized Healthcare Plan (IHP), including an Emergency Care Plan component, should be developed. (See Appendices D and E.) Staff should be cognizant of those students whose health conditions may warrant emergency care and should be educated to his/her role in caring for these students in the event of an emergency. (See Appendix C for an overview and guidance in developing policies and procedures pertaining to some of the more common conditions requiring medications during school hours.)

A. Self-administration of Emergency Medications

Self-administration of emergency medication in schools refers to situations in which students carry their own medication and administer it during the school day as ordered by their licensed prescriber and authorized by their parent/guardian and school district. Students with diagnoses such as asthma and life-threatening allergies are good examples when self-administration may be appropriate and necessary. The Public School Code was amended (Act 187 of 2004) to add a provision to the School Health services chapter stating “Each school entity shall develop a written policy to allow for the possession and self-administration by children of school age of an asthma inhaler and the prescribed medication to be administered thereby in a school setting.” (See Appendix S for complete statutory language at 24 P.S. §14-1414.1.)

School policy and procedures must clearly define the circumstances under which self-administration is permitted and describe the decision making process. These policies should:

- Specify that the CSN perform a baseline assessment of the student's health status;
- Require the CSN to ensure that the student is competent in self-care through demonstration of administration skills and responsible behavior;
- Provide for the periodic and ongoing assessment by the CSN of the student's self-management skills;
- Require notification of the CSN immediately following each use;
- Include provisions for the immediate confiscation of the medication and loss of self-administration privileges if the school policies are abused or ignored. If privileges are revoked, the Emergency Care Plan would need to be revised to ensure availability of the medication to the student.

In order to accommodate students who carry and self-administer emergency medications, the following should be in place:

- An order from a licensed prescriber for the medication, including a statement that it is necessary for the student to carry the medication and that the student is capable of self-administration;
- Written parental/guardian consent;
- An Individualized Healthcare Plan (IHP), including an Emergency Care Plan component.

Note: See Appendix C for clinical and policy guidance pertaining to common medical conditions requiring emergency medications.

X. MISCELLANEOUS MEDICATIONS

A. Homeopathic Remedies, Herbal Preparations, Enzymes, Vitamins and Minerals

This group of medicinal therapies is part of what is referred to as Complimentary and Alternative Medicine (CAM). The National Center for CAM (NCCAM) is one of the 27 entities that make up the National Institutes of Health (NIH). According to a NIH survey completed in 2007 and released December 8, 2008, Americans continue to use more and more of these complimentary and alternative medicines and therapies. In 2007 approximately 38% of American adults and almost 12% of children used CAM (NCCAM 2008). According to the American Academy of Pediatrics (AAP) Task Force on CAM convened in 2000 and the AAP Provisional Section on Complementary, Holistic, and Integrative Medicine in 2005 – CAM is used in 20 – 40 % of healthy children and more than 50% of children with chronic, recurrent, and incurable conditions, including asthma, attention deficit/hyperactivity disorder, autism, cancer, cerebral palsy, cystic fibrosis, inflammatory bowel disease, and juvenile rheumatoid arthritis. Medications commonly used in children include multivitamins, herbs and other dietary supplements. 2-10 % of children use homeopathic therapies for respiratory conditions, teething and otitis media (Kemper, et al, 2008). However, children react differently than adults to medicinal substances and in general, CAM therapies have not been well studied in children (NCCAM 2007).

According to the National Association of School Nurses (NASN) “School nurses should assess each request for administration of any product that could be considered a drug, including ‘natural remedies’, herbs, vitamins, dietary supplements, homeopathic medicines or medications from other countries” in light of the district’s medication administration policy (NASN, 2006). Schools must decide whether to develop policies that permit or prohibit the use of these substances within the school setting. If a school policy permits the administration of CAM, they should be treated as any other medication requiring a licensed prescriber’s order and parent/guardian permission.

As with any therapeutic intervention, when complementary and/or alternative medicines are requested to be administered, the first consideration is the health and safety of the student. When considering the administration of these substances in school, the following questions should be addressed:

- Does this substance need to be given during school hours?
- Is there documentation regarding the safety and efficacy of the substance?
- Has a licensed prescriber written an order for this substance?
- Has the parent/guardian provided written permission for the substance to be administered in school?

B. Off-Label and Research Medications

Off-label medications are Federal Drug Administration (FDA) approved medications prescribed for non-approved purposes. “The professional standard for off-label prescription is that the unapproved use of a legal drug must be based on reasonable medical evidence with the same judgment as exercised in medical practice in general” (NASN, 2001). Research or investigational medications are substances undergoing formal study, are currently involved in clinical trials, but don’t have FDA approval.

The school health program may receive requests from parents/guardians and/or health care providers to administer off-label or research medications to students. If use is to be permitted, schools should develop policies and procedures that include management and administration of all such substances. All requests should be evaluated by a multidisciplinary team, including but not limited to: the school nurse, the licensed prescriber, the school physician, and the parent/guardian. If a school policy permits administration of off-label and research medications, it requires a licensed prescriber’s order and parent/guardian consent.

For off-label use medications, the team should have evidence to support the safe use at school. For clinical trials, the team should have access to the research protocol. In either case, the team should have documentation to support the safe use of this type of medication for a particular student (who may otherwise have a negative outcome without the use of the substance).

C. Fluoride

Fluoride is a “naturally occurring element that prevents tooth decay systemically when ingested during tooth development and topically when applied to erupted teeth” (American Dental Association, 2005). Fluoride, a dietary supplement, can be delivered to teeth in one of three ways: mouth rinse, tablet or topical application. Administration is appropriate for students living in areas where the community or school water supplies are not fluoridated. Issues to consider and recommended actions before implementation of a fluoride program within a school may be to:

- Assess whether the community and school have a fluoridated water supply, including present concentrations;
- Consult with the school dentist and school dental hygienist, if applicable;
- Obtain approval from the school board and administration for program implementation;
- Develop a fluoride plan;
- Obtain a standing order from the school dentist for fluoride administration to the students and update order annually;
- Send information to parent(s)/guardian(s) regarding the program;
- Develop a parent/guardian consent form. This form should include questions to determine if the student can receive fluoride in school:
 - Is the student receiving fluoride as a supplement in any form or vitamins that contain fluoride at home?
 - Does the household where the student resides have a fluoridated water supply?
 - If the household has well water has it been tested for fluoride?
- Obtain a written parent/guardian consent form from each student.

Issues to consider when developing a plan and implementing a fluoride program:

- Although considered a “dietary supplement,” fluoride should be treated as a prescribed medication requiring both an order from the school dentist and parent/guardian consent.
- Teachers may administer fluoride supplements as part of this unique dental program; fluoride is prescribed on a mass rather than an individual basis, and does not require teachers to exercise medical judgment.
- As a precautionary measure, fluoride should be stored in a locked area.

For dosage, implementation and actions or other issues related to a fluoride mouth rinse, tablet or topical application program, confer with the school dentist, dental consultant or school dental hygienist and refer to the Department of Health’s *Procedures for the School Dental Health Program for Pennsylvania’s School Age Population*, available at www.health.state.pa.us/schoolhealth.

D. Potassium Iodide (KI)

Schools that are located within the 10-mile radius around Pennsylvania's five nuclear power plants are eligible to participate in the Department of Health's potassium iodide (KI) pre-distribution program. The facilities, their locations and general service areas (in Pennsylvania only) are below. (Note: All service areas include only parts of particular counties, dependent upon the 10-mile radius.)

- Beaver Valley Power Station, Shippingport Borough, Beaver Co. (Beaver Co.)
- Limerick Generator Station, Limerick Township, Montgomery Co. (Berks Co., Chester Co., and Montgomery Co.)
- Susquehanna Steam Electric Station, Salem Township, Luzerne Co. (Columbia Co. and Luzerne Co.)
- Three Mile Island Nuclear Generating Station, Londonderry Township, Dauphin Co. (Cumberland Co., Dauphin Co., Lancaster Co., and York Co.)
- Peach Bottom Atomic Power Station, Peach Bottom Township, York Co. (Lancaster Co. and York Co.)

The intent of this program is to provide free KI tablets to eligible schools in order to assist them in planning for and implementing a distribution program in the event of an accidental release of radioactive iodine.

The thyroid is the part of the body that quickly absorbs potentially harmful radioactive iodine. KI **will not** protect against all radioactive materials. It is only effective against radioactive iodine when directed to be taken at the time of or immediately following a radiological release. Evacuation is the best way to protect oneself if there is a release of radioactive iodine in your area.

Issues to consider and recommended actions to take before implementing a KI program within a school are as follows:

- Assess whether the school is located within a 10-mile radius of a nuclear plant;
- Develop a multi-disciplinary team comprised of, but not limited to, administration, facility manager, medical staff (school physician and school nurses), faculty, county emergency management, and others to develop program recommendations;
- Obtain approval from the school board for program implementation;
- Develop a plan to have KI available during a radiological emergency;
- Obtain a standing order from the school physician for KI tablet administration to the students/staff and update order annually (See VII Medication Management, B. Standing Orders);
- Develop a parent/guardian consent form;
- Send information to parent(s)/guardian(s) regarding the program;
- Treat KI as a prescribed medication requiring parent/guardian consent and update annually (See VII Medication Management, C. Parent/Guardian Consent);

- Complete and submit a Department of Health *KI Participation Request and Agreement for Schools* form to obtain KI tablets;
- Store KI in a secure location, as a precautionary measure, and under controlled conditions.

Technical assistance for developing and implementing a KI pre-distribution program, including general information, KI fact sheet, participation request and agreement, sample school physician standing order and label for storage container, sample parent/guardian consent, tablet administration options and protocols, tablet storage and handling guidelines and other actions, is available to eligible schools from the Pennsylvania Department of Health. All documents are also available at:

<http://www.dsf.health.state.pa.us/health/cwp/view.asp?A=180&Q=244422>.

E. Oxygen

If a school district policy makes oxygen available for emergency situations, there must be a standing order for its use from the school physician. The order should include protocols, the route of administration, flow rate, and when to administer the oxygen. There should also be a protocol for storage and oxygen use warning identification. For individual students who have a chronic condition that may warrant oxygen administration, an individual order should be obtained from their primary care provider.

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Appendix A

Excerpts from the American Nurses Association Code of Ethics for Nurses with Interpretive Statements, 2001

The Code of Ethics for Nurses serves the following purposes:

- * It is a succinct statement of the ethical obligations and duties of every individual who enters the nursing profession.
- * It is the profession's nonnegotiable ethical standard.
- * It is an expression of nursing's own understanding of its commitment to society.

Ethical- reasons for decisions about how one ought to act.

Moral- overlaps with "ethical" but is more aligned with personal belief and cultural values.

1. The nurse, in all professional relationships, practices with compassion and respect for the inherent dignity, worth, and uniqueness of every individual, unrestricted by considerations of social or economic status, personal attributes, or the nature of health problems.

- 1.1 Respect for human dignity
- 1.2 Relationships to patients
- 1.3 The nature of health problems
- 1.4 The right to self-determination
- 1.5 Relationships with colleagues and others

2. The nurse's primary commitment is to the patient, whether an individual, family, group, or community.

- 2.1 Primacy of the patient's interests
- 2.2 Conflict of interest for nurses
- 2.3 Collaboration
- 2.4 Professional boundaries

3. The nurse promotes, advocates for, and strives to protect the health, safety, and rights of the patient.

- 3.1 Privacy
- 3.2 Confidentiality
 - * the nurse has a duty to maintain confidentiality of all patient information
 - * the nurse's responsibility to provide quality care requires that relevant data be shared with those members of the health care team who have a need to know-only to those directly involved with the patient's care.
- 3.3 Protection of participants in research
- 3.4 Standards and review mechanisms
- 3.5 Acting on questionable practice - The nurse's primary commitment is to the health, well being, and safety of the patient across the lifespan and in all

settings in which health care needs are addressed. As an advocate for the patient, the nurse must be alert to and take appropriate action regarding any instances of incompetent, unethical, illegal or impaired practice by any member of the health care team or the health care system or any action on the part of others that places the rights or best interests of the patient in jeopardy. To function effectively in this role, nurses must be knowledgeable about the Code of Ethics, standards of practice of the profession, relevant federal, state and local laws and regulations and the employing organization's policies and procedures.

3.6 Addressing impaired practice

4. The nurse is responsible and accountable for individual nursing practice and determines the appropriate delegation of tasks consistent with the nurse's obligation to provide optimum patient care.

4.1 Acceptance of accountability and responsibility

4.2 Accountability for nursing judgment and action

- * Nurses are accountable for judgments made and actions taken in the course of nursing practice, irrespective of health care organizations' policies or providers' directives.

4.3 Responsibility for nursing judgment and action

- * Nurses accept or reject specific role demands based upon their education, knowledge, competence, and extent of experience.

- * The nurse must not engage in practices prohibited by law or delegate activities to others that are prohibited by the practice acts of other health care providers.

4.4 Delegation of nursing activities

- * Employer policies or directives do not relieve the nurse of responsibility for making judgments about the delegation and assignment of nursing care tasks.

5. The nurse owes the same duties to self as to others, including the responsibility to preserve integrity and safety, to maintain competence, and to continue personal and professional growth.

5.1 Moral self-respect

5.2 Professional growth and maintenance of competence

5.3 Wholeness of character

5.4 Preservation of integrity

6. The nurse participates in establishing, maintaining, and improving health care environments and conditions of employment conducive to the provision of quality health care and consistent with the values of the profession through individual and collective action.

6.1 Influence of the environment on moral virtues and values

6.2 Influence of the environment on ethical obligations

6.3 Responsibility for the health care environment

* Nurse administrators have a particular responsibility to assure that employees are treated fairly and that nurses are involved in decisions related to their practice and working conditions. Acquiescing and accepting unsafe or inappropriate practices, even if the individual does not participate in the specific practice, is equivalent to condoning unsafe practice.

7. The nurse participates in the advancement of the profession through contributions to practice, education, administration, and knowledge development.

7.1 Advancing the profession through active involvement in nursing and in health care policy

7.2 Advancing the profession by developing, maintaining, and implementing professional standards in clinical, administrative, and educational practice

7.3 Advancing the profession through knowledge development, dissemination, and application to practice

8. The nurse collaborates with other health professionals and the public in promoting community, national, and international efforts to meet health needs.

8.1 Health needs and concerns

8.2 Responsibilities to the public

9. The profession of nursing, as represented by associations and their members, is responsible for articulating nursing values, for maintaining the integrity of the profession and its practice, and for shaping social policy.

9.1 Assertion of values

9.2 The profession carries out its collective responsibility through professional associations

9.3 Intraprofessional integrity

9.4 Social reform

Appendix B

American Nurses Association National Association of School Nurses Nursing: Scope and Standards of Practice 2004

Standards are authoritative statements by which the nursing profession describes the responsibilities for which its practitioners are accountable. Standards reflect the values and priorities of the profession.

Definition of Nursing: “Nursing is the protection, promotion, and optimization of health and abilities, prevention of illness and injury, alleviation of suffering through the diagnosis and treatment of human response, and advocacy in the care of individuals, families, communities, and populations.”

Definition of School Nursing: “School nursing is a specialized practice of professional nursing that advances the well-being, academic success, and lifelong achievement and health of students. To that end, school nurses facilitate positive student responses to normal development; promote health and safety; intervene with actual and potential health problems; provide case management services; and actively collaborate with others to build student and family capacity for adaptation, self-management, self advocacy, and learning” (NASN, 1999).

STANDARDS OF PRACTICE (ANA)

Standards of Practice for School Nurses 2005 (NASN/ANA)

Standard 1. Assessment

The registered nurse collects comprehensive data pertinent to the patient’s health or the situation.

The school nurse collects comprehensive data pertinent to the client’s health or the situation.

Standard 2. Diagnosis

The registered nurse analyzes the assessment data to determine the diagnoses or issues.

The school nurse analyzes the assessment data to determine the diagnosis or issues.

Standard 3. Outcomes Identification

The registered nurse identifies expected outcomes for a plan individualized to the patient or the situation.

The school nurse identifies expected outcomes for a plan individualized to the client or the situation.

Standard 4. Planning

The registered nurse develops a plan that prescribes strategies and alternatives to attain expected outcomes.

Measurement Criteria: The registered nurse defines the plan to reflect current statutes, rules and regulations, and standards.

The school nurse develops a plan that prescribes strategies and alternatives to attain expected outcomes.

Standard 5. Implementation

The registered nurse implements the identified plan.

The school nurse implements the identified plan.

Standard 5A: Coordination of Care

The registered nurse coordinates care delivery.

The school nurse coordinates care delivery.

Standard 5B: Health teaching and Health Promotion

The registered nurse employs strategies to promote health and a safe environment.

The school nurse provides health education and employs strategies to promote health and a safe environment.

Standard 5C: Consultation

The advanced practice registered nurse and the nursing role specialist provide consultation to influence the identified plan, enhance the abilities of others and effect change.

The school nurse provides consultation to influence the identified plan, enhance the abilities of others, and effect change.

Standard 5D: Prescriptive Authority and Treatment

The advanced practice registered nurse uses prescriptive authority, procedures, referrals, treatment, and therapies in accordance with state and federal laws and regulations.

The advanced practice registered nurse, uses prescriptive authority, procedures, referrals, treatment, and therapies in accordance with state and federal laws and regulations.

Standard 6. Evaluation

The registered nurse evaluates progress towards attainment of outcomes.

The school nurse evaluates progress towards achievement of outcomes.

STANDARDS OF PROFESSIONAL PERFORMANCE (ANA)

Standards of Professional School Nursing Performance (NASN/ANA)

Standard 7. Quality of Practice

The registered nurse systematically enhances the quality and effectiveness of nursing practice.

The school nurse systematically enhances the quality and effectiveness of nursing practice.

Standard 8. Education

The registered nurse attains knowledge and competency that reflects current nursing practice.

The school nurse attains knowledge and competency that reflects current school nursing practice.

Standard 9. Professional Practice Evaluation

The registered nurse evaluates one's own nursing practice in relation to professional practice standards and guidelines, relevant statutes, rules, and regulations.

The school nurse evaluates one's own nursing practice in relation to professional standards and guidelines, relevant statutes, rules, and regulations.

Standard 10. Collegiality

The registered nurse interacts with and contributes to the professional development of peers and colleagues.

The school nurse interacts with, and contributes to the professional development of, peers and school personnel as colleagues.

Standard 11. Collaboration

The registered nurse collaborates with patient, family, and others in the conduct of nursing practice.

The school nurse collaborates with the client, the family, school staff, and others in the conduct of school nursing practice.

Standard 12. Ethics

The registered nurse integrates ethical provisions in all areas of practice.

Measurement Criteria:

The registered nurse:

- Maintains patient confidentiality within legal and regulatory parameters.
- Contributes to resolving ethical issues of patients, colleagues, or systems as evidenced in such activities as participating on ethics committees.
- Reports illegal, incompetent, or impaired practices.

The school nurse integrates ethical provisions in all areas of practice.

Standard 13. Research

The registered nurse integrates research findings into practice.

The school nurse integrates research findings into practice.

Standard 14. Resource Utilization

The registered nurse considers factors related to safety, effectiveness, cost, and impact on practice in the planning and delivery of nursing services.

The school nurse considers factors related to safety, effectiveness, cost, and impact on practice in the planning and delivery of school nursing services.

Standard 15. Leadership

The registered nurse provides leadership in the professional practice setting and the profession.

The school nurse provides leadership in the professional practice setting and the profession.

Standard 16. Program Management

The school nurse manages school health services.

Appendix C

Common Medical Conditions Requiring Medication Administration During School

Appendix C provides an overview of some of the more common medical conditions requiring medication administration during school, including guidance for the development of policies and procedures. The information provided for these five conditions may serve as a template for schools in addressing other medical conditions.

Allergies

- A. Definition:** Allergies can be described as an increased hypersensitivity to a particular substance. Antigens are substances that can cause an allergic reaction. Common antigens are tree and grass pollens, animal dander, mold spores, bee stings, latex and certain foods. According to the Food Allergy and Anaphylaxis Network, a food allergy is “an immune system response to a food that the body mistakenly believes is harmful. Although an individual could be allergic to any food, such as fruits, vegetables, and meats, there are eight foods that account for 90% of all food-allergic reactions. These are: milk, egg, peanut, tree nut (walnut, cashew, etc.), fish, shellfish, soy, and wheat.”

It is important to recognize the symptoms of an allergic reaction and respond quickly with treatment to prevent a severe reaction from happening.

1. **An Allergic Reaction:** An allergic reaction can involve any or all of the following systems and the symptoms may include:
 - a. **Integumentary:** Hives, edema, rash, pruritus or eczema flare.
 - b. **Digestive:** Cramps, nausea, vomiting, or diarrhea.
 - c. **Respiratory:** Itchy and watery eyes, rhinitis, sneezing, coughing, itching or swelling of lips, tongue and throat, change in voice, difficulty swallowing, tightness of chest, wheezing, shortness of breath, or repetitive throat clearing.
 - d. **Cardiovascular:** Reduced blood pressure, increased heart rate, or shock.
 - e. **Neurological:** Weakness or a feeling of impending doom.
2. **Anaphylaxis:** A severe, potentially life threatening reaction that can be commonly caused by an allergy to food, latex, stinging insects, and medications. Anaphylaxis can involve all the systems.

- B. The goal of medication therapy:** To reverse a reaction to an antigen.

C. Common Categories of Allergy Medication:

1. **Antihistamines:** Work by blocking histamines that are released during an allergic reaction. Antihistamines can be a prescription or an over-the-counter medication and are available in liquid, tablet, capsule or injection form. Antihistamines may cause

drowsiness, dry mouth, and restlessness. Some of the new types of antihistamines do not cause drowsiness.

2. Decongestants: Relieve congestion by shrinking the blood vessels in the nose. The medication is available over-the-counter or by prescription in tablet, liquid or spray form. Nose sprays can relieve congestion but may cause rebound congestion if used for more than two or three days.
3. Sympathomimetics: Medications that imitate the sympathetic nervous system and are the drug of choice for severe allergic reactions. Epinephrine, the most common, is an injectable adrenalin that constricts blood vessels. This in turn raises the blood pressure which improves perfusion and dilates the bronchioles, opening the airway and improving respiration. This will reduce bronchospasms, edema and congestion in the bronchial tree.
4. Bronchodilators: Open the bronchial tubes so more air can flow through. Bronchodilators relieve coughing, wheezing, and shortness of breathe and are available in tablets, capsules, liquid, inhalers or injectables. Side effects of these medications may include restlessness, headache, insomnia and mouth and throat irritation from inhalers.
5. Corticosteroids: Anti-inflammatory agents that can reduce inflammation and suppress immune response. The medication is available in many forms. Common side effects are dependent upon route of administration, dose, and duration of therapy. Nurses need to refer to drug references for specifics.

D. Common Emergency Medications for Allergies:

1. Epinephrine auto-injector
 - a. Classification: Bronchodilator, sympathomimetic.
 - b. Indications: Emergency treatment for acute asthmatic attacks, bee stings, anaphylaxis and allergic reactions to produce bronchodilation, cardiac and central nervous system stimulation.
 - c. Adverse reactions: Tremors, anxiety, dizziness, palpitations, tachycardia, dysrhythmias, anorexia, nausea, vomiting and dyspnea.
 - d. Route and dosage: IM; follow direction of the licensed prescriber for specific dosage.
 - e. Miscellaneous implications: Epinephrine auto-injectors are prescription medications that are available for emergency use. There are one-time use auto-injectors containing the prescribed dosage of medication, and multi-dose auto-injectors. The auto-injectors are easy to use and designed to be given in the thigh.
 - f. Nursing implications for epinephrine auto-injectors:
 - Store the auto-injector in the container provided at room temperature to protect it from light or heat.
 - Check expiration date and replace if expired.

- Do not store in refrigerator.
 - Do not remove cap until ready for use.
 - The medication may need to be repeated in twenty minutes if the symptoms do not reverse (See Section IX Emergency Medications).
 - Follow directions on the auto-injector manufacturer's label.
- g. Document the date, time, medication, dose, route of administration and signature of the licensed personnel administering the medication on the student's medication record.
 - h. Notify parent(s)/guardian(s) of incident.
 - i. **If the epinephrine auto-injector is administered, 911 needs to be called immediately.** The individual should be transported by ambulance even if symptoms subside after receiving the epinephrine.

E. Nursing Implications for Allergies:

1. Obtain a complete health history on the student from the parent(s)/guardian(s). Request that the parent/guardian provide information regarding the student's past medical history, the name of the primary care provider/licensed prescriber and medications if applicable.
2. Develop an IHP (See Appendix D.1) and an Emergency Care Plan (See Appendix E.1. and E.2.) for students who have allergies that may warrant emergency medical attention.

As an example, reading ingredient statements on labels to check for the scientific and technical names for offending ingredients should be part of a medical plan of care for students with food allergies.

- Package labeling can be written "either-or" to identify the oils by source (e.g. corn or soybean or peanut oil) (Taylor, 1999).
 - Peanuts as an ingredient or oil can be hidden in such foods as egg rolls, spaghetti sauce, cookies, chili, candy and baked goods.
 - Care must be taken to ensure that food preparation items are clean and free from any peanut residue.
3. Manage the student with allergies through a team effort which could include the parent(s)/guardian(s), student, school personnel, teachers, emergency services, and the physician.

F. Policy Implications for Allergies:

1. Develop protocols regarding allergy management and emergency response.
2. The following statements may provide guidance for inclusion in the policy:

- a. Avoidance of the allergen is the most important prevention. For example, limiting the use of fragrant sprays and deodorizers.
 - b. Read ingredient statements on labels to check for the scientific and technical names for offending ingredients.
3. Develop a school policy regarding administration of medications during an emergency. School districts will occasionally be requested to permit a student to carry his/her auto-injector at all times. School policy should be clearly written that addresses this issue, including:
 - a. A medication order from a licensed prescriber.
 - b. Parent/guardian consent forms kept on file.
 - c. Location of auto-injectors for easy accessibility.
4. For students carrying their auto-injectors, school policy should include the following:
 - a. The medication order should include:
 - That the student can properly administer the auto-injector.
 - That the student can carry the auto-injector in school.
 - Specific directions for administration.
 - b. Evaluation by the CSN of the student's capability to self carry in the school setting.
 - c. A system for immediate confiscation of the medication and loss of self carrying privileges if the school policies are abused or ignored.
 - d. Training staff members to administer auto-injector in the case of anaphylaxis as part of first aid preparedness.
5. Any policy development process should include parent(s)/guardian(s) education, as well as educating school personnel and students regarding allergies and prevention of allergic reactions. For example students sent to the nurse's office for signs/symptoms of an allergic reaction should be sent with a partner.
6. Food Allergies
 - a. Schools should develop guidelines for the management of students with food allergies. A School Health Advisory Council or other identified core team of individuals including, but not limited to, administrator, certified school nurse, faculty, food service management, parents and students should establish a prevention plan to decrease the risk of accidental exposure.
 - b. For more information on food allergies and school guidelines for managing students with food allergies, go to:
 - [Food Allergy and Anaphylaxis Network](#)
 - [School Guidelines For Managing Students with Food Allergies](#)
 - [School Food Allergy Action Plans](#)
7. Insect Stings

Collaborate with the maintenance department to decrease the incidence of insect stings by:

- a. Removing any insect hives immediately;
- b. Keeping garbage containers tightly covered;
- c. Avoiding eating outside at school.

Asthma

A. Definition: Asthma is a chronic inflammatory disorder characterized by inflammation of the airway and constriction of the bronchial smooth muscle. Symptoms include shortness of breath, coughing, wheezing, chest tightness, and increased use of accessory muscles of respiration. Each person with asthma reacts to a different set of triggers. The triggers may include allergens (furry animals, grasses and trees), cold air, upper respiratory infections, environmental pollutants (smoke and fumes), exercise and emotions. There is no cure for asthma, but it can be effectively controlled through an accurate diagnosis, appropriate treatment and ongoing monitoring.

B. The goal of medication therapy is to ensure that the student:

1. Is symptom free most of the time.
2. Is able to sleep through the night (does not wake up through the night from coughing or other asthma symptoms.)
3. Is not absent from school due to asthma.
4. Decreases hospitalizations, emergency room visits or acute care visits.
5. Enjoys activities without interruptions from asthma.
6. Has normal or near normal lung function.
7. Reduces the risk of long-term damage to his/her lungs.

C. Common Categories of Asthma Medication: Asthma medications are usually divided into two types: long-term control medications and quick relief medications. Most individuals use a combination of long-term control medications and quick-relief medications to manage their asthma.

1. Long-term control medications are taken daily and can achieve and maintain control of asthma symptoms. Long-term medications work to decrease inflammation of the airway. Some examples of long-term medications include inhaled or systemic corticosteroids, leukotrienes, and long-acting beta2-agonist bronchodilators.
2. Quick relief medications work rapidly by relaxing the muscles around the airways. Some examples of quick relief medications are short acting, rapid-onset inhaled

beta2-agonist bronchodilators, anticholinergics and systemic corticosteroids.

D. Common Emergency Medications for Asthma

1. Rescue Inhaler

- a. Classification: Short-acting bronchodilators (SABA); anticholinergics may be used along with a SABA to eliminate a reoccurrence (an anticholinergic is not to be used alone for quick relief).
- b. Indications: To treat acute symptoms of asthma caused by muscle spasms in the bronchial tree.
- c. Adverse reaction: SABA – tremor, tachycardia, headache; anticholinergics – dry mouth, increased wheezing in some students.
- d. Route and dosage: Inhalation; follow direction of the licensed prescriber for specific dosage.
- e. Nursing implications for Rescue Inhalers:
 - Assess the student for signs of an asthma attack such as coughing, wheezing, difficulty breathing, chest tightness.
 - Assess the student for inadequate asthma control such as increase use of short-acting beta2-agonists, use of >1 canister / month, or lack of expected effect and know the *Rule of Two*'s: Does the student...
 - Use rescue inhaler more than 2 times / week?
 - Wake up more than 2 times / month due to asthma?
 - Refill his or her rescue inhaler more than 2 times / year?
- f. If any of these occur the nurse should suggest to the parent/guardian that the student be seen by his or her primary care provider for reevaluation (American Academy of Allergy Asthma and Immunology, 1999).
 - Communicate instructions calmly to the student.
 - Document the date, time, medication, dose, route of administration and signature of the licensed personnel administering the medication on the student's medication record.
 - Notify emergency services (911) if there is no improvement or condition worsens after initial treatment.
 - Notify parent(s)/guardian(s) of incident.

E. Nursing Implications for Asthma:

1. Obtain a complete health history on the student from the parent(s)/guardian(s). Request that the parent(s)/guardian(s) provide information regarding the student's past medical history, the name of the primary care provider/licensed prescriber and medications if applicable.

2. Develop an IHP (See Appendix D.1) and an Asthma Action Plan. (See Appendix E.3.)
3. Provide peak flow monitoring to students as needed.
 - a. A peak flow meter measures the flow of forced exhaled air in liter/minute.
 - b. Students can monitor their lung function by using a peak flow meter and may help identify the start of an asthma episode before any symptoms begin.
 - c. It is important to determine a baseline peak flow measure for each student, which can be labeled as his or her personal best when asymptomatic.
 - d. To use the peak flow meter have the student:
 - Set the arrow or marker at zero on the scale.
 - Hold peak flow meter without covering opening where exhaled air flows.
 - Stand up straight and take a deep breath.
 - Blow into mouthpiece as hard and as quickly as possible; the marker will move to the number by the force of the breath.
 - Repeat steps 1-5 two more times and record the highest number achieved.
 - Keep a diary or a graph to measure asthma control.
4. Provide education to the student on the use and care of a spacer.
 - a. A spacer is a holding chamber that attaches to a metered dose inhaler.
 - b. The spacer holds the medicine in its chamber long enough for the person to inhale the medicine in one or two slow deep breaths.
 - c. Spacers
 - Deliver more medicine to the lungs.
 - Prevent side effects that inhaled medicine can cause when it enters the bloodstream through the lining of the mouth.
 - Prevent coughing while inhaling the medicine.
 - d. To use a spacer have the student:
 - Secure the spacer on the end of the inhaler's mouthpiece.
 - Shake the inhaler.
 - Press down on the inhaler to release medicine into the spacer's holding chamber.
 - Seal his/her lips around the spacer mouthpiece and inhale slowly.
 - Hold breath for 10 seconds and exhale. Repeat steps 3, 4, and 5.
 - Follow the directions with the prescribed medication.
 - Rinse his/her mouth if taking an inhaled steroid.
5. To care for an inhaler and spacer:

- a. Keep the cover on the inhaler and carry it in a clean plastic bag to prevent dust or lint from blocking the mouthpiece.
 - b. Store at room temperature.
 - c. Store the metal canister with the nozzle end down.
 - d. Wash the plastic mouthpiece with mild dish washing soap and warm water twice a week. Rinse and dry well before putting it back.
 - e. Check expiration date on the inhaler and replace if expired.
 - f. Do not puncture, break, or burn the metal canister, even if it is empty.
6. Implement preventative measures to help the student eliminate asthmatic episodes.
 - a. Identify and eliminate triggers within the school environment.
 - b. Administer maintenance prescription medications.
 - c. Give the student plenty of clear liquids, water, etc.
7. Implement the following steps if exercise triggers an asthma episode at school:
 - a. Give prescribed treatment 10-15 minutes prior to exercise.
 - b. Take peak flow measurements before exercise. If peak flow is low, do not allow child to exercise or do so cautiously.
 - c. Do warm up exercises before exertion.
 - d. Make sure quick relief medications are available to the student at all times. If students are not permitted to carry medications, make sure quick-relief medications are kept in a safe, easily accessible place.
8. Manage acute asthma episodes.
 - a. Keep the student calm.
 - b. Administer prescribed medication for an acute attack (quick relief medications).
 - c. Encourage the student to sit in a comfortable position to promote relaxation.
 - d. Encourage the student to try pursed lip breathing – slowly breathe in through the nose and out through pursed lips.
 - e. If condition does not improve:
 - Continue to follow the student's IHP/ Asthma Action Plan.
 - Notify parent(s)/guardian(s) and recommend immediate medical care.
 - In severe cases, notify emergency medical services.

F. Policy Implications for Asthma:

1. Develop protocols regarding asthma management and emergency response.
2. Per 24 P.S. § 14-1414.1, all schools must develop a policy allowing students to possess and self-administer asthma inhalers. The policy should include:
 - a. Clearly written parameters for when and how the policy may be implemented.
 - b. A medication order from a licensed prescriber.
 - c. Parent/guardian consent form must be kept on file.
3. The policy for students carrying their inhalers should address the following:

- a. What information should be included in the medication order:
 - That the student can properly administer the inhaler.
 - That the student can carry the inhaler in school.
 - Specific directions for administration (e.g. use of a spacer).
 - b. Evaluation by the CSN of the student's capability to self carry in the school setting.
 - c. A system by which the student notifies the nurse after each use of the emergency inhaler.
 - d. A system for immediate confiscation of the medication and loss of self carrying privileges if the school policies are abused or ignored.
4. Any policy development process should include parent(s)/guardian(s) education, as well as educating school personnel and students regarding asthma and prevention of asthma symptoms.

Note: For more detailed guidance on asthma management in schools, see the Pennsylvania Department of Health/Philadelphia Allies Against Asthma Coalition's "*Pennsylvania Pediatric Asthma Toolkit*" available at <http://www.paasthma.org/asthma-resources/asthma-toolkit>.

Attention Deficit Hyperactive Disorder (ADD/ADHD)

- A. **Definition:** a "persistent pattern of inattention and/or hyperactivity-impulsivity that is more frequent and severe than is typically observed in individuals at a comparable level of development" (American Psychiatric Association, 1994).
- B. **The goal of medication therapy:** To allow the student to access a free and appropriate education and to maximize the student's ability to learn.
- C. **Common Categories of ADD/ADHD Medication:**
 1. Stimulants are believed to be effective due to their ability to increase the student's dopaminergic and noradrenergic activity. Stimulants can increase attention span and short-term memory, reduce distractibility, reduce motor activity and improve cognitive performance.
 2. There are alternatives to stimulants. They are not FDA approved for the treatment of ADHD, but useful in controlling the hyperactivity of ADHD. One mechanism of action is to inhibit the release of norepinephrine that enhances excitatory inputs and increases alertness.
 3. Antidepressants are another category of drugs used to treat ADHD. Tricyclic antidepressants (TCA) are effective in reducing hyperactivity, improving mood, and

enhancing sleep, but do not appear to positively affect concentration.

4. Antipsychotic medications have been used with limited success. They are less effective and have significant side effects.

D. Nursing Implications for ADD/ADHD:

1. Obtain a complete health history on the student from the parent(s)/guardian(s). Request that the parent(s)/guardian(s) provide information regarding the student's past medical history, the name of the primary care provider/licensed prescriber and medications if applicable.
2. Develop an IHP (See Appendix D.1) if appropriate. Assessment of the effectiveness of the medication through school behavior and academic performance is important. The CSN should also be involved in the development of an IEP if appropriate.
3. Keep stimulants used to treat ADD/ADHD that are Class II controlled substances in a locked cabinet. These medications must also be counted when brought to school.
4. Administration timing is very important with ADD/ADHD students. Rebound effects may be seen if doses are not given at appropriate times.

E. Policy Implications for ADD/ADHD:

1. Develop protocols regarding management of students with ADD/ADHD behaviors. For example, procedures may be needed to assist students in completing assignments, reporting for medication and maintaining communication between home and school.
2. The policy should address the security of drugs that may be prescribed for students to take in school. Many of these drugs are scheduled drugs that require special attention. (See VII, E, 2. Storage and Security of Medications.) Methylphenidate has become increasingly abused by teenagers. The tablets are often crushed and snorted like cocaine. Methylphenidate can be addictive when abused (U.S. Dept. of Justice, 2005).
3. Education of parent(s)/guardian(s), students, and teachers is important in the treatment of ADD/ADHD.
4. The policy needs to address the method for dealing with behaviors that may or may not be previously identified as ADD or ADHD. Behavior modification and appropriate structure is as important as medication for effective treatment of ADD/ADHD.

Cystic Fibrosis (CF)

A. Definition: “A generalized multisystem disorder affecting the exocrine glands so the substances they secrete are abnormally viscous, affecting primarily pulmonary and gastrointestinal function” (Nettina, 2005). This disease is inherited (autosomal recessive trait) and affects more males than females.

B. The goal of medication therapy: To stay free of infection and to maintain a healthy digestive tract.

C. Common Categories of Cystic Fibrosis Medication:

1. Antibiotics may be indicated to treat pulmonary infections. One of the goals for a student with CF is to minimize and prevent lung complications.
2. Digestive enzymes are indicated to ensure adequate digestion to promote normal growth and development.

D. Nursing Implications for Cystic Fibrosis:

1. Obtain a complete health history on the student from the parent(s)/guardian(s). Request that the parent(s)/guardian(s) provide information regarding the student's past medical history, the name of the primary care provider/licensed prescriber and medications if applicable.
2. Develop an IHP (See Appendix D.1) for students with CF. The CSN should also be involved in the development of a 504 Plan. (See Appendix F, if appropriate.)
3. Administer pancreatic enzymes with all meals and snacks. Do not crush or chew enteric-coated tablets or beads from capsules.
4. Encourage dietary practices that will promote growth, especially foods high in calories, protein and fat. Since individuals with CF only absorb 80% to 85% of their dietary intake, dietary allowances should be higher than the recommended daily requirements (Nettina, 2005).
5. Discuss with parent(s)/guardian(s) their child's need for salt replacement especially during warm weather.
6. Provide information or resources on CF to families (i.e. Cystic Fibrosis Foundation, Special Kids Network).
7. Educate parent(s)/ guardian(s), school personnel and students regarding CF.

E. Policy Implications for Cystic Fibrosis:

1. Develop protocols regarding Cystic Fibrosis management.
2. School policy should include education of teachers, staff, students, and parents.
3. Policy may be for management of chronic diseases and not specific to Cystic Fibrosis. However the need for dietary supplements should be known to health room staff and dietary staff.

Diabetes

A. **Definition:** A chronic disease that occurs when there is not enough insulin produced by the pancreas. This illness is characterized by abnormal glucose metabolism. The two types of diabetes most often found in the school setting are Type 1 diabetes or Insulin Dependent Diabetes Mellitus (IDDM) and Type 2 diabetes or Non-Insulin Dependent Diabetes Mellitus (NIDDM). The school nurse may also, on occasion, care for a student or staff member with Gestational Diabetes.

B. **The goal of medication therapy:** To maintain even blood sugar levels and allow the student to learn.

C. Common Categories of Diabetes Medication:

1. Hormones: Insulin is a hormone produced by the pancreas. It is prescribed in injectable form when an individual cannot produce insulin on his or her own. The types of insulin are grouped based on their length of action. This includes the time of how quickly the onset of action begins, when peak action occurs and the duration of action; manufacturers' package inserts will have the most current information.
 - a. Insulin can be delivered by syringe and needle, insulin pump, insulin pen or automatic injector aids.
 - Pre-mixed insulin is more convenient for those that have trouble mixing insulin, such as people with poor vision or coordination. A variety of pre-mixed insulins are available in pre-filled pens. Depending on the type of cartridge in the pen, it may need to be gently rolled to mix the insulin and may require refrigeration. Check the manufacturer's instructions.
 - Insulin can be stored in the refrigerator and at room temperature. It is recommended to store the bottles not being used in the refrigerator to enhance the longevity of the insulin. Insulin stored at room temperature may last for a month or two. Never store insulin at extreme temperatures, like in the freezer or in direct sun light.
 - Always check the expiration date.

- Insulin should be assessed for appearance and consistency. NPH – check for any crystals in the insulin or inside the bottle, look for any small particles or clumps inside the bottle – do not use if present; notify parent.
- b. Glucagon is another hormone that can be given by injection to raise the blood glucose level. It is given when a student has hypoglycemia and cannot take juice or glucose tablets by mouth.
2. Oral diabetic agents may be administered for type 2 diabetes. These agents can have a variety of actions, such as:
- Block enzymes that break down starches allowing for the slowing of absorption.
 - Suppress the liver from producing too much glucose and slow the absorption of glucose from the gut.
 - Help by reducing insulin resistance by improving target cell response to insulin.
 - Stimulate the pancreas to produce insulin and for the body to respond better to the insulin it does produce.

D. Common Emergency Medications for Diabetes:

1. Glucagon

- a. Classification: Pancreatic hormone
- b. Indications: Acute management of severe hypoglycemia when administration of glucose is not feasible.
- c. Adverse reactions: Nausea, vomiting.
- d. Route and dosage: IM or SC; follow direction of the licensed prescriber for specific dosage.
- e. Nursing implications for glucagon:
 - Assess student for signs of hypoglycemia (sweating, hunger, weakness, headache, dizziness, etc.) prior to and periodically during therapy.
 - Administer only by licensed personnel who have been instructed on glucagon administration and can competently monitor the student.
 - Administration of this substance requires professional nursing assessment and skill in the dosage calculation, mixing of the diluents with the medication, preparing syringe for administration and the actual administration of the medication. Therefore, the administration of glucagon is not comparable to the administration of an epinephrine auto-injector, which is premixed and doesn't require the exact positioning for administration that glucagon does.
 - Assess for nausea and vomiting after administration of dose. Protect students with depressed level of consciousness from aspiration by positioning on side.
 - Feed student supplemental carbohydrates orally to replenish liver glycogen and prevent secondary hypoglycemia as soon as possible after awakening. Quick dissolving glucose tablets should be kept on hand.

- Document the date, time, medication, dose, route of administration and signature of the licensed personnel administering the medication on the student's medication record.
- Notify parent(s)/guardian(s) of incident.

E. Nursing Implications for Diabetes Mellitus:

1. Obtain a complete health history on the student from the parent(s)/guardian(s). Request that the parent(s)/guardian(s) provide information regarding the student's past medical history, the name of the primary care provider/licensed prescriber and medications.
2. Develop an IHP (See Appendix D.1) and an Emergency Care Plan (See Appendix E.1 and E.2.) for students with diabetes. The CSN should also be involved in the development of a 504 Plan. (See Appendix F, if appropriate.)
3. Manage the diabetic student with a balance of nutrition, exercise and hyperglycemic agents (oral or injectable), monitoring of blood glucose levels and good general hygienic care. Strict adherence to the medical regimen is essential for health maintenance and prevention of secondary complications.
4. Ensure that insulin is stored and handled properly.
5. Follow Standard Precautions during glucose monitoring and when disposing of insulin syringes and testing equipment.
6. Anticipate concerns that may affect the student's participation in the school program. Educate the parent(s)/guardian(s) regarding school practices and policies.
7. Invite community resources to participate in the education of school personnel regarding diabetes in the classroom. A good resource to utilize is your local Diabetes Nurse Educator.
8. Educate parent(s)/guardian(s), school personnel and students about diabetes including signs and symptoms of hyperglycemia and hypoglycemia and how to respond to them.

F. Policy Implications for Diabetes Mellitus:

Develop a school policy regarding diabetes management.

1. Policies should include parameters as schools may be requested to permit a student to self manage his/her diabetes, including blood glucose testing and administration of insulin. This policy should be clearly written identifying the parameters under which self- management can occur.

- a. Parameters may include, but are not limited to:
 - Age.
 - Developmental level of the student.
 - Demonstrated competence in self management.
 - Safe and supportive environment.
 - A medication order from a licensed prescriber.
 - A parent/guardian consent form.
 - b. The CSN must evaluate the student's capability to self manage in the school setting.
 - c. A system by which the student notifies the nurse after each use of the emergency medication or blood glucose testing should be identified.
 - d. A system for immediate confiscation of the medication and supplies as well as loss of self management privileges if the school policies are abused or ignored should be identified.
2. Policies should address concerns for students who require insulin, and the following information should be included in the medication order:
 - a. That the student can properly test his/her blood glucose.
 - b. That the student can self-administer his/her insulin.
 - c. Specific directions for administration.

Note: For more detailed guidance on diabetes management in schools, see the PA Department of Health's "*Diabetes in School Children: A Recommendation and Resource Guide for School Personnel*" available at http://www.dsf.health.state.pa.us/health/lib/health/Diabetes_and_School_Children.pdf.

Seizure Disorder

- A. Definition:** A seizure is a discrete event that results from abnormal neuronal discharges occurring suddenly in the brain. There are different types of seizures and various causes. This can be a chronic or self limiting disorder; sometimes new onset is related to injury or illness.
- B. The goal of medication therapy:** To limit seizure activity and restore normal function to the student so that he/she can learn to his/her highest potential.
- C. Common Categories of Seizure Medication:**

Anti-seizure drugs can be classified based on the mechanism of action. There are several major mechanisms of action (Leppik, 2000):

- Sodium channel medications
- GABA enhancement medications
- Mixed mechanisms (excitatory amino acid, sodium channel, GABA)
- Calcium channel medications
- Unknown mechanism medications

D. Common Emergency Medications for Seizure Disorder:

1. Rectal diazepam

- Classification:** Antianxiety, anticonvulsant, skeletal muscle relaxant.
- Indications:** Used as an adjunct medication to control bouts of seizure activity in the management of seizures for children that are on antiepileptic medication regimens.
- Adverse reactions:** Drowsiness, diarrhea, dizziness, headache, abdominal pain, ataxia, suppressed respirations and rash.
- Route and dosage:** Rectally; follow direction of the licensed prescriber for specific dosage.
- Nursing implications for rectal diazepam:**
 - Recognize student's symptoms of seizure activity and implement the student's Emergency Care Plan, ensuring that the assessment of the student's condition is completed prior to administration and documented as soon as possible after student has been stabilized.
 - Check label for directions when to administer rectal diazepam to student.
 - Administer only by licensed personnel who have been instructed on rectal diazepam administration and can competently monitor the student.
 - Maintain student's privacy as much as possible during administration.
 - Insert syringe gently into rectum and administer rectal diazepam as ordered, slowly counting to three.
 - Remove syringe gently from rectum and then hold buttocks together to the count of three.
 - Follow first aid instructions during seizure:
 - Protect the student during the seizure. Ease student to the floor and remove all objects that could cause harm. Do not restrain the student.
 - Loosen tight clothing.
 - Do not force any objects into the student's mouth or between their teeth.
 - Turn student to their side to allow saliva to drain from their mouth to avoid choking.
 - Assess the student during the seizure, specifically the duration, intensity and characteristics of seizure activity and after the administration of rectal diazepam.

- Monitor vital signs and assess for respiratory depression.
- Notify emergency services (911) if a seizure lasts longer than 2-3 min or as specified by the student's primary care provider.
- Document the date, time, medication, dose, route of administration and signature of the licensed personnel administering the medication on the student's medication record.
- Notify parent(s)/guardian(s) of incident.

E. Nursing Implications for Seizure Disorder:

1. Obtain a complete health history on the student from the parent(s)/guardian(s). Request that the parent(s)/guardian(s) provide information regarding the student's past medical history, the name of the primary care provider/licensed prescriber and medications.
2. Develop an IHP (See Appendix D.1 and D.2) and Emergency Care Plan (See Appendix E.1 and E.2.) for students with epilepsy. The CSN should also be involved in the development of a 504 Plan. (See Appendix F, if appropriate.)
3. Elicit from the parent(s)/ guardian(s) or physician what type of seizure is most commonly experienced by the student, if an aura is/is not experienced, usual duration of a seizure and if loss of consciousness is part of the student's experience with seizures and what to expect post seizure.
4. Anticipate concerns that may affect the student's participation in the school program. Educate the parent(s)/guardian(s) regarding school practices and policies.
5. Invite community resources to participate in the education of school personnel regarding seizures in the classroom. A good resource to utilize is the Epilepsy Foundation. The presentations available are free and cover topics such as Seizure Recognition and First Aid, Knowing the Hidden Signs of Seizures.
6. Educate school personnel and parent(s)/guardian(s) about seizure emergency response.

F. Policy Implications for Seizure Disorder:

1. Develop protocols regarding seizure management and emergency response.
2. The policy should include who is to be prepared to administer emergency medication.
3. All policy development should include education of the parent(s)/guardian(s), school staff and students. For example, staff should send a student with seizure disorder history to the nurse's office with a partner. Any illness or injury may increase the risk of seizure activity.

Individualized Healthcare Plan (IHP) Template

Assessment Data	Nursing Diagnosis	Outcomes Identification	Nursing Interventions	Evaluation
<p>The data collection phase helps determine the student's current health status and any actual or potential health concerns.</p> <p>The CSN should:</p> <ul style="list-style-type: none"> • Interview the student, parents/guardians, faculty and any individual(s) that are responsible for providing care to the student. • Review the student's health records, including communication with the health care provider. Consent from the parent/guardian may be required. 	<p>The CSN uses the assessment data to formulate a nursing diagnosis.</p> <p>The CSN should:</p> <ul style="list-style-type: none"> ▪ Utilize the North American Nursing Diagnosis Association (NANDA) classification system to assist with development of the nursing diagnosis. ▪ Determine if the health problem is actual or potential. 	<p>The CSN identifies the desired results of nursing intervention and states these in measurable terms.</p> <p>The CSN should:</p> <ul style="list-style-type: none"> ▪ Develop goals that are realistic, clear, specific, measurable, and have a time frame. ▪ Collaborate with the student and the parents/guardians in developing the goal. 	<p>Nursing interventions are selected to achieve desired results.</p> <p>The CSN should:</p> <ul style="list-style-type: none"> ▪ Develop the interventions necessary to maximize school attendance and promote optimal health. ▪ Include faculty and staff as appropriate. ▪ Ensure that the interventions are outcome related. 	<p>The CSN measures the effectiveness of nursing interventions in meeting the identified outcomes. Changes are made to the plan as needed.</p> <p>The CSN should:</p> <ul style="list-style-type: none"> ▪ Collaborate with the student, parents/guardians, faculty and any other individual(s) that are responsible for providing care to the student to determine the effectiveness of the plan. Were there any interventions that should be re-evaluated? Barriers to care? ▪ Review periodically.

Adapted from NASN position statement on IHPs, 2005

Haas, Marykay B., The School Nurse's Source Book of Individualized Healthcare Plans, 1993

Sample Individualized Healthcare Plan (IHP) for Seizure Disorder

Assessment	Nursing Diagnosis	Outcomes Identification	Nursing Interventions	Evaluation
<p>JK is a 15 year old female who has tonic-clonic seizure activity several times/week as the result of a head injury 2 years ago.</p> <p>Seizure starts with “staring” or “daydreaming” for several minutes before tonic-clonic activity begins.</p> <p>Post-seizure, JK is generally sleepy for 10-20 minutes.</p> <p>Exacerbated with extremes of emotion or tiredness.</p> <p>Have had several episodes of cluster seizures requiring Diastat administration.</p>	<p>N.D.1 Potential for injury related to seizure activity and prior head trauma.</p> <p>N.D.2 Potential for respiratory distress related to seizure activity.</p> <p>N.D.3 Potential for body-image disturbance related to incontinence during seizure activity.</p> <p>N.D.4 Potential for knowledge deficit due to loss of class time.</p>	<p>N.D.1 To prevent injuries during seizure activity.</p> <p>N.D.2 To maintain a patent airway during seizure activity.</p> <p>N.D.3 To prevent body-image problems by maintaining privacy during seizure activity.</p> <p>N.D.4 To decrease loss of time on learning task.</p>	<p>N.D.1 Educate school personnel on first aid procedures for seizures.</p> <p>N.D.2 Position JK on her side during seizure activity.</p> <p>N.D.3 Remove other students from area during seizure activity.</p> <p>N.D.4 Monitor the number of episodes and length of class time missed during a marking period.</p>	<p>N.D.1 During Inservice on 9/1/08, school personnel educated on first aid procedures for seizures.</p> <p>N.D.2 Seizure on 9/15/08, respirations maintained at 12-15/minute. No respiratory distress noted.</p> <p>N.D.3 Seizure on 9/15/08, students removed from classroom within 2 minutes of onset of seizure activity.</p> <p>N.D.4 9/15/08 only seizure for 1st marking period. 30 minutes of class time missed.</p>

Parent/Provider Template for Emergency Care

(School District Name)

Student Name: _____ Date: _____

School: _____ Teacher/Grade: _____

Dear Parent(s)/Guardian(s):

It is indicated on your child's health record or emergency card that he/she has a medical condition that may require an emergency intervention. In order to provide your child with the appropriate care, we request that this form be completed by you and your primary care provider and/or specialist and returned to the school nurse immediately. If there are any changes in this information during the school year, please notify the school nurse in writing.

Contact Information:

If possible, provide at least 2 phone numbers for each contact, during school hours.

Parent/Guardian Name/Phone Number(s): _____

Parent/Guardian Name/Phone Number(s): _____

Emergency Contact (if Parent/Guardian not available)/Relationship to Child/Phone Number:

Medical Condition: _____

Location of Medication & Other Supplies: _____

Signs of Emergency: _____

Management:

1. _____

2. _____

3. _____
4. _____
5. _____
6. _____
7. _____

If medications are listed as part of management, please have your primary care provider or medical specialist complete the following information, as a medication order:

Name of Medication: _____

Route and Dosage: _____

Frequency and Time of Administration: _____

Specific Directions: _____

Additional Information (i.e. allergies or possible side effects, if applicable): _____

Date of Order: _____

Discontinuation Date: _____

Licensed Prescriber Signature: _____

Licensed Prescriber Name Printed: _____

Licensed Prescriber Phone Number: _____

Parent/Guardian Signature: _____

By signing this form, the parent/guardian acknowledges that some or all of this information may be shared with individual school staff on a need to know basis, as determined by the Certified School Nurse. The nurse will use this information to develop an Emergency Care Plan in order to provide optimal care for your child in school.

Emergency Care Plan (ECP) Template

Name: _____ DOB: _____

School: _____ Grade: _____

Parent/Guardian Emergency Contact: _____

Telephone (h) : _____ (w): _____ (cell): _____

Parent/Guardian Emergency Contact: _____

Telephone (h) : _____ (w): _____ (cell): _____

Emergency Contact (if Parent/Guardian not available)/Relationship/Telephone Number:

Healthcare provider/Telephone: _____

KNOWN ALLERGIES: _____

HEALTH PROBLEM: _____

IN A HEALTH EMERGENCY (STUDENT) LOOKS LIKE:

PLEASE DO THE FOLLOWING:

Parent/Guardian Signature: _____ Date: _____

Certified School Nurse Signature: _____ Date: _____

Adapted from J. Selekman, School Nursing: A Comprehensive Text, 2006



Asthma Action Plan

(To be completed by Doctor/Nurse)



Name	Birth Date	Effective Date
School	Parent/Guardian	Parent's Phone
Doctor/Nurse's Name	Doctor/Nurse's Office Phone	
Emergency Contact After Parent	Contact Phone	

Asthma Severity: ☐ Mild Intermittent ☐ Mild Persistent ☐ Moderate Persistent ☐ Severe Persistent

Asthma Triggers: ☐ Colds ☐ Exercise ☐ Animals ☐ Dust ☐ Smoke ☐ Food ☐ Weather ☐ Other: _____

TAKE THESE MEDICINES EVERYDAY

Child feels good:

- Breathing is good
- No cough or wheeze
- Can work/play
- Sleeps all night



Peak flow in this area:

_____ to _____

MEDICINE:	HOW MUCH:	WHEN TO TAKE IT:

Green

20 MINUTES BEFORE EXERCISE USE THIS MEDICINE:

--	--	--

IF NOT FEELING WELL

TAKE EVERYDAY MEDICINES AND **ADD** THESE RESCUE MEDICINES

Child has any of these:

- Cough
- Wheeze
- Tight Chest



Peak flow in this area:

_____ to _____

MEDICINE:	HOW MUCH:	WHEN TO TAKE IT:

Yellow

Call your doctor/nurse's office if the symptoms don't improve in 2 days OR if the flare lasts for longer than ____ days. After ____ days go back to GREEN ZONE and take everyday medications as instructed.

IF FEELING VERY SICK CALL THE DOCTOR OR NURSE NOW!

TAKE THESE MEDICINES

Child has any of these:

- Medicine not helping
- Breathing is hard and fast
- Lips and fingernails are blue
- Can't walk or talk well



Peak flow below:

MEDICINE:	HOW MUCH:	WHEN TO TAKE IT:

Red

IF UNABLE TO CONTACT YOUR DOCTOR OR NURSE:
Call 911 or go to the nearest emergency room and bring this form with you!

I give permission to the doctor, nurse, health plan, and other health care providers to share information about my child's asthma to help improve the health of my child.

Parent/Guardian Signature _____

Date _____

Health Care Provider Signature _____

One copy for the Health Care Provider, one copy for Parent, return color copy to the School Nurse.

Model Protected Handicapped Student Chapter 15 Service Agreement (504 Plan) For a Student with Diabetes

[Note: This model Chapter 15 Service Agreement (504 Plan) lists a broad range of services and accommodations that might be needed by a child with diabetes in school. The plan should be individualized to meet the needs, abilities, and medical condition of each student and should include only those items in the model that are relevant to that student. Some students will need additional services and accommodations that have not been included in this model plan.]

.....

SCHOOL DISTRICT NAME
SCHOOL DISTRICT ADDRESS
CHAPTER 15 SERVICE AGREEMENT (504 PLAN)

OBJECTIVES/GOALS OF THIS PLAN

Diabetes can cause blood glucose (sugar) levels to be too high or too low, both of which affect the student's ability to learn as well as seriously endanger the student's health both immediately and in the long term. The goal of this plan is to provide the related aids and services needed to maintain blood glucose levels within this student's target range, and to respond appropriately to levels outside of this range in accordance with the instructions provided by the student's personal health care provider team.

DEFINITIONS USED IN THIS PLAN

1. **Medical Management Plan (MMP):** A plan, written by the student's personal health care provider team, which is communicated to the school nurse and includes medication orders and protocols for response to this particular student's medical needs.
2. **Individualized Healthcare Plan (IHP):** A plan that describes the diabetes care regimen and identifies the health care needs of a student with diabetes. This plan is developed by the school nurse, based upon the recommendations and medical orders of the student's personal health care provider team and the student's current condition.
3. **Emergency Care Plan (ECP):** A plan that provides school personnel with essential information on how to recognize and react to signs and symptoms of low blood glucose and/or high blood glucose. This plan is developed by the school nurse based on the recommendations and medical orders of the student's personal health care provider team and the student's current condition as assessed by the school nurse.

4. **Licensed Health Room Staff:** Certified School Nurse (CSN); Registered Nurse (RN); Licensed Practical Nurse (LPN).

Date: ____/____/____

School: _____

☐ Medical

☐ OT/PT

☐ Social/Emotional/Behavioral

☐ Homebound Instruction

☐ Initial Agreement

☐ Modified Agreement

Student Name: _____ Grade: _____ School Year: _____

Parent/Guardian Name: _____

FOLLOWING IS A SUMMARIZATION OF THE RECOMMENDATIONS AND AGREEMENTS FOR ACCOMMODATIONS THAT ARE NEEDED BY YOUR CHILD TO MEET HIS/HER NEEDS. THESE RECOMMENDATIONS ARE A RESULT OF THE RECENT EVALUATION AND/OR PRESCRIPTION FROM DOCTOR(S), THERAPISTS, OR OTHER HEALTH PERSONNEL.

Provision of Diabetes Care

1. In Pennsylvania, insulin and glucagon injections require the assistance of a licensed nurse during school hours, school sponsored activities and/or on school sponsored trips.
2. All staff members that interact with diabetic students will be able to recognize symptoms of high blood glucose and low blood glucose and be able to react to these symptoms as per the Emergency Care Plan (ECP), Individualized Healthcare Plan (IHP), and Medical Management Plan (MMP).
3. _____ shall have immediate access to all items necessary for the treatment of low and high blood glucose, including blood glucose testing equipment, insulin, syringes and fast acting sugar (i.e., juice boxes, glucose tabs, glucose gel) as provided by parent/guardian and ordered by a medical provider.
4. Blood glucose checks as ordered by the medical provider may be done by the CSN, RN, LPN, parent/guardian, student (when able) or authorized school personnel at any location in school. The licensed nurse will assess the resulting data as per the IHP and/or the ECP.
5. The CSN, RN, LPN, parent or student can give insulin doses as ordered by the medical provider, with the written approval of the parent/guardian.
6. Health room staff may contact _____'s medical provider for advice or consultation when necessary. Phone numbers to be provided by parent/guardian and available in health office and student's ECP.

7. _____'s diabetic ECP will be made available to all staff including substitute teachers, bus drivers, etc. as appropriate per the CSN.

Student's Level of Self-care and Location of Supplies and Equipment

1. The student is able to perform the following diabetes care tasks without help or supervision as per the MMP and as assessed by the professional nurse (CSN or RN):

NOTE: The student will be permitted to provide this self-care as directed by the MMP, IHP, and ECP as to time, locations, including all school sponsored activities.

2. The student needs assistance or supervision with the following diabetes health care tasks:

3. The student needs a licensed nurse to perform the following diabetes health care tasks:

4. The student will be permitted to carry the following diabetes supplies and equipment with him/her at all times and in all locations:

5. Diabetes supplies and equipment that are not kept on/with the student will be kept:

6. Parent/guardian is responsible for providing diabetes supplies, equipment, snacks and/or other food to meet the needs of the student as directed in the MMP, IHP and ECP.

Snacks and Meals

1. _____ shall be permitted to have snacks, in compliance with all other policies, (i.e., food allergy) whenever and wherever necessary during the school day as ordered by the medical provider. Parents/guardian will supply the snacks. (Snacks must be available.)
2. _____ will be allowed to have enough time to finish his/her lunch and snacks. Lunch will be the same time each day unless he/she requires earlier lunch due to low blood sugar or delayed lunch due to treatment of high blood sugar.
3. The parent/guardian will supply snacks needed in addition to or instead of any snacks supplied for all students.
4. _____'s parents/guardian will be notified three days in advance, (or as soon as possible in emergency situations), with any changes in the school's schedule that may affect diabetic care.

Exercise and Physical Activity

1. If _____'s blood glucose level is outside of acceptable range for physical education prior to gym class, where heavy exercise is anticipated, he/she will be excused without penalty by the CSN or RN/LPN in consultation with the CSN and in accordance with his/her MMP, IHP, and /or ECP.
2. The student shall be permitted to participate fully in physical education classes and team sports, except as set out in the student's IHP, MMP and/or ECP.
3. Responsible school staff members will make sure that the student's quick-acting source of glucose, and water, and/or adequate supervision is always available at the site of physical education class and team sports practices and games.

Water and Bathroom Access

1. _____ shall be permitted to use the bathroom without restrictions as ordered by a medical provider.
2. _____ shall be permitted to have immediate access to water, including keeping a water bottle in his/her possession or be allowed to use the drinking fountain without restrictions as ordered by a medical provider.
3. If _____ needs to take breaks to use the bathroom, water fountain, or for any treatment related to his/her diabetes he/she will be given extra time to finish the test and/or assignment without penalty.

Checking Blood Glucose Levels, Insulin and Medication Administration, and Treating High or Low Blood Glucose Levels

1. Blood glucose monitoring will be done at the times designated in the student's IHP and MMP and whenever _____ feels his/her blood glucose level may be high or low or when symptoms of high or low blood glucose levels are observed.
2. In the event _____ shows signs/symptoms of hypo or hyperglycemia (low or high blood glucose) he/she will be treated according to the MMP, IHP and the ECP and then escorted to the health room by a responsible person.
3. When necessary, urine will be tested for ketones and treatment given by the CSN, RN, or LPN, in accordance with the MMP, IHP, and ECP.
4. Any staff member finding _____ unconscious will call 911, and then contact the nurse on duty in the building. If no nurse is in the building, call the CSN assigned to the building and call the parents, as per the Emergency Care Plan (ECP).
5. _____'s glucose results will be recorded in his/her daily log. A copy of the daily log will be sent home with the student at the end of the school week.

Field Trips and Extracurricular Activities

1. A parent/guardian will be allowed, but not required, to accompany _____ on field trips.
2. All diabetic supplies will accompany _____ on field trips.
3. _____ may take his/her own food and lunch on field trips.
4. _____ will be under the supervision of a responsible adult prepared to respond to symptoms of high or low blood glucose levels per the ECP.

Tests and Classroom Work

1. If _____ needs to take breaks to use the bathroom, water fountain, or for any treatment related to his/her diabetes he/she will be given extra time to finish the test and/or assignment without penalty.
2. If _____ is affected by high or low blood glucose levels at the time of regular or standardized testing he/she will be permitted to test at a later time.
3. If class time is missed for diabetic management, _____ will be responsible to obtain class work and homework assignments by the end of that school day or as directed in the IHP/MMP.
4. _____ shall be permitted to leave class to go to the Certified School Nurse (CSN) or designated health room personnel for diabetes related issues.
5. _____ will not be penalized for visits to the health room in order to maintain blood glucose control.

6. _____ will not be penalized for absences or tardiness required for medical appointments or illness. Notes from the medical provider and or parents/guardian will be required according to school policy.
7. _____'s IHP will address management options to decrease loss of educational time.
8. If _____ misses two or more consecutive days of school, the teachers will compile his/her work to be sent home with a sibling or picked up by a parent in the main office, or as planned in IHP/MMP.

Communication

1. The school nurse and all other staff will keep the student's diabetes information confidential.
2. Encouragement is essential. The student shall be treated in a way that encourages the student to eat snacks on time, and to progress toward self-care with his/her diabetes management skills.
3. Each substitute teacher and substitute school nurse will be provided with written instructions regarding the student's diabetes care and a list of all school nurses.

Emergency Evacuations and Shelter-in-Place

1. Consider _____'s needs for licensed nursing care and supplies (including snacks/food and medication requirements around the clock) and equipment when planning for this contingency.

TYPE OF SERVICE, SERVICE PROVIDER AND DURATION OF SERVICE MUST BE INCLUDED AS APPROPRIATE.

****IN THE EVENT OF AN EMERGENCY, _____'s *EMERGENCY CARE PLAN* ON FILE IN THE NURSE'S OFFICE AND COMMUNICATED WITH ALL WHO NEED TO KNOW, IS TO BE FOLLOWED.**

THE ATTACHED LETTER OUTLINES YOUR RIGHTS TO RESOLVE ANY DISPUTES THAT YOU MAY HAVE CONCERNING THE RECOMMENDATIONS. IF YOU HAVE ANY QUESTIONS CONCERNING YOUR RIGHTS OR THE ABOVE RECOMMENDATIONS, PLEASE FEEL FREE TO CONTACT ME.

School District Professional Employee and Phone Number

Date: _____

Central Office Approval

Date: _____

DIRECTIONS TO PARENTS: Please check one of the options, sign, and return this form to:
Student Services, (*NAME*) School District, Administration
Building, (*School District*) Address.

☐ I agree and give permission to
proceed as recommended.

☐ I do not agree and do not give permission
to proceed as recommended and will
schedule planning conference.

My reason for disapproval is: _____

Parent/Guardian Signature: _____ Date: _____

Licensed Prescriber Prescriptive Parameters

The following information is taken from 49 Pennsylvania Code, Professional and Vocational Standards, Chapter 21, *State Board of Nursing*; Chapter 33, *State Board of Dentistry*; Chapter 23, *State Board of Optometry*; Chapters 16 & 18, *State Board of Medicine*; Chapter 25, *State Board of Osteopathic Medicine*; Chapter 29, *State Board of Podiatry*; and *Osteopathic Medical Practice Act*. This section will provide the definition of each licensed prescriber and his/her prescribing parameters. Refer to these chapters for more information on each licensed prescriber.

Licensed Prescriber	Definition	Prescribing Parameters		
Certified Registered Nurse Practitioner (C.R.N.P)	“A registered nurse licensed in this Commonwealth who is certified by the Boards in a particular clinical specialty area and who, while functioning in the expanded role as a professional nurse, performs acts of medical diagnosis or prescription of medical therapeutic or corrective measures in collaboration with and under the direction of a physician licensed to practice medicine in this Commonwealth.” (49 Pa Code, Ch. 21, §21.251).	May prescribe and dispense medications from specified categories after requirements of §18.53 and §21.283 are met. These are: antihistamines; anti-infective agents; cardiovascular medications; antineoplastic agents, unclassified therapeutic agents, devices and pharmaceutical aids; autonomic medications; blood formation, coagulation and anticoagulation medications, and thrombolytic and antithrombolytic agents; central nervous system agents; contraceptives including foams and devices; diagnostic agents; disinfectant for agents used on objects other than skin; electrolytic, caloric and water balance; enzymes; antitussive, expectorants and mucolytic agents; gastrointestinal medications; local anesthetics; eye, ear, nose and throat preparations; serum, toxoids and vaccines; skin and mucous membrane agents; smooth muscle relaxants; vitamins; and hormones and synthetic substitutes. (49 Pa Code, Ch. 21, §21.284 (b)).	Restrictions on prescribing and dispensing medications: Schedule II substances for up to a 30 day supply and Schedule III or IV substances for up to a 90 day supply as identified in the collaborative agreement. (49 Pa Code, Ch. 21, §21.284 (d)(1)(2)).	May NOT prescribe or dispense medications from the following categories: gold compounds; heavy metal antagonists; radioactive agents; oxytocics; and Schedule I controlled substances as defined by section 4 of the Controlled Substance, Drug, Device and Cosmetic Act (35 P.S. §780-104). (49 Pa Code, Ch. 21, §21.284 (f)).
Dentist	An individual who has submitted certification of graduation from a dental school accredited or	May prescribe, administer or dispense medication or a controlled substance in compliance with the following		May NOT prescribe, administer or dispense outside the scope of the

	provisionally accredited by the Commission on Accreditation of the American Dental Association and has passed the National Board Dental Examination and the Northeast Regional Board Dental Examination. (49 Pa Code, Ch. 33, §33.102 (a) (1) & §33.103 (a)).	minimum standards: Within the scope of the dentist-patient relationship; following a dental examination and in accordance with treatment principles accepted by a responsible segment of the profession. (49 Pa Code, Ch. 33, §33.207 (a) (ii) (iii) and §33.208 (a) (ii) (iii)).		dentist-patient relationship. (49 Pa Code, Ch 33, §33.207 and 33.208).
Optometrist	An individual who has a Doctor of Optometry degree from an accredited optometric educational institution in the United States or Canada and has passed the Board of Examination. (49 Pa Code, Ch. 23, §23.11).	May prescribe and administer the following if certified in pharmaceutical agents for therapeutic purposes: topical anesthetics, topical ocular lubricants, ophthalmic dyes and stains, topical hyperosmotic agents, topical autonomic medications, topical nonsteroidal anti-inflammatory medications, antimicrobial agents (topical or oral antibacterials and antivirals, topical antifungal and antiparasitics) and topical or oral analgesics. (28 Pa Code, Ch. 6, §6.1).		May NOT administer any drug parentally, treat glaucoma, continue treatment beyond 6 weeks unless the optometrist documents consultation with a licensed physician, prescribe beta-blockers, steroids or Schedule I or II substances. (28 Pa Code, Ch 6, §6.1).
Physician (M.D.)	An individual licensed to practice medicine and surgery in the Commonwealth of Pennsylvania. (49 Pa Code, Ch. 16, §16.92).	May prescribe and administer medications following the minimum standards under 49 Pa Code §16.92 (controlled substance).		May NOT prescribe anabolic steroids to “increase muscle mass, strength, or weight, without medical necessity and to improve a person’s performance in exercise, sport or game.” (49 Pa Code §16.97(i), (ii).
Physician (D.O.)	An individual licensed to practice osteopathic medicine and surgery in the Commonwealth of Pennsylvania. (49 Pa Code, Ch. 25, §25.2).	May cure disease and preserve the health of man with or without drugs. (Osteopathic Medical Practice Act, Section 2).		
Physician Assistant	“An individual who is certified as	May prescribe, dispense and	Restrictions on prescribing	May NOT prescribe or

(P.A.)	a physician assistant by the Board.” (49 Pa Code, Ch. 18, §18.122).	administer drugs and therapeutic devices as delegated to by their supervising physician. (49 Pa Code, Ch. 18, §18.158 (a)). Shall comply with the minimum standards for ordering and administering controlled substances specified in 49 Pa Code, Ch. 16, § 16.92.	and dispensing medications: Schedule II substances for initial therapy, up to a 72 hour dose. For ongoing therapy, may write a prescription for a Schedule II substance for up to 30 days. (49 Pa Code, Ch. 18, §18.158 (a)).	dispense from the following categories: Schedule I controlled substances as defined by section 4 of the Controlled Substances, Drug, Device and Cosmetic Act. (49 Pa Code, Ch. 18, §18.158 (a)).
Podiatrist	An individual that has graduated from an accredited school of podiatric medicine and surgery, has passed a Board certification and has satisfactorily passed a clinical examination on the subject of podiatry. (49 Pa Code, Ch. 29, §29.11).	May prescribe and administer therapeutic drugs such as the following: Analgesics, antipyretics (narcotic and non-narcotic), antibiotics, antifungals, antihistamines, anesthetics, anti-infectives, anti-inflammatories (glucocorticoids, analgesic compounds, glucocorticoids and steroids), antinauseants, dermatologicals (antifungals, antiseptic topical, bath use, calamine, zinc oxide preparations, corticoids, poison ivy and antihistamine preparations, scabicides, pediculocides, and vitamin preparations), enzymes, fungal agents, hemorheologic agents, hypnotic drugs and sedatives (barbiturates, nonbarbiturates, and muscle relaxants), peripheral vasodilators, and vitamins. (Pa Code, Ch. 29, §29.41).		

Appendix H

Excerpts from RN and LPN Regulations Pertaining to Medication Administration

The
Pennsylvania



49 PA Code, Chapter 21, State Board of Nursing, Subchapter A. Registered Nurses

GENERAL PROVISIONS

A. § 21.1. Definitions.

Practice of professional nursing—

- (i) Diagnosing and treating human responses to actual or potential health problems through such services as case findings, health teaching, health counseling, provision of care supportive to or restorative of life and well-being, and executing medical regimens as prescribed by a licensed physician or dentist.
- (ii) The term does not include acts of medical diagnosis or prescription of medical therapeutic or corrective measures, except as may be authorized by rules and regulations jointly promulgated by the State Board of Medicine and the Board, which rules and regulations will be implemented by the Board.

RESPONSIBILITIES OF THE REGISTERED NURSE

B. § 21.11. General functions.

- (a) The registered nurse assesses human responses and plans, implements and evaluates nursing care for individuals or families for whom the nurse is responsible. In carrying out this responsibility, the nurse performs all of the following functions:
 - (1) Collects complete and ongoing data to determine nursing care needs.
 - (2) Analyzes the health status of the individuals and families and compares the data with the norm when possible in determining nursing care needs.
 - (3) Identifies goals and plans for nursing care.
 - (4) Carries out nursing care actions which promote, maintain and restore the well-being of individuals.
 - (5) Involves individuals and their families in their health promotion, maintenance and restoration.
 - (6) Evaluates the effectiveness of the quality of nursing care provided.

(b) The registered nurse is fully responsible for all actions as a licensed nurse and is accountable to clients for the quality of care delivered.

(c) The registered nurse may not engage in areas of highly specialized practice without adequate knowledge of and skills in the practice areas involved.

(d) The Board recognizes standards of practice and professional codes of behavior, as developed by appropriate nursing associations, as the criteria for assuring safe and effective practice.

Source

The provisions of this § 21.11 amended October 22, 1976, effective October 23, 1976, 6 Pa.B. 2677. Immediately preceding text appears at serial page (9690).

C. § 21.14. Administration of drugs.

(a) A licensed registered nurse may administer a drug ordered for a patient in the dosage and manner prescribed.

(b) A licensed registered nurse, responsible for administering a drug, may supervise a graduate nurse or a nursing student in an approved nursing education program in the administration of the drug. In this section, “supervise” means the licensed registered nurse is physically present in the area or unit where the student or unlicensed graduate is practicing. This definition is not intended to limit in any way the practice of practical nursing as defined in the Practical Nurse Law (63 P. S. § § 651—667).

Authority

The provisions of this § 21.14 amended under section 2.1(k) of the Professional Nursing Law (63 P. S. § 212.1(k)); and section 17.6 of the Practical Nurse Law (63 P. S. § 667.6).

Source

The provisions of this § 21.14 amended October 22, 1976, effective October 23, 1976, 6 Pa.B. 2677; amended November 4, 1977, effective November 5, 1977, 7 Pa.B. 3263; amended December 19, 2003, effective December 20, 2003, 33 Pa.B. 6219. Immediately preceding text appears at serial pages (261719) to (261720).

Cross References

This section cited in 28 Pa. Code § 107.64 (relating to administration of drugs); and 49 Pa. Code § 21.413 (relating to interpretations regarding the administration of drugs—statement of policy).

D. § 21.16. Immunization

(a) Immunization and skin testing is a proper function of a registered nurse and is a function regulated by this section, and the function may not be performed unless all of the following conditions are met:

- (1) A written order has been issued by a licensed physician. The order may be a standing order applicable to individuals or groups.
- (2) The policies and procedures under which the registered nurse may administer immunizing agents and do skin testing have been established by a committee representing the nurses, the physicians and the administration of the agency or institution. These written policies and procedures shall be available to the nurse. The committee shall also perform the following functions:
 - (i) Identify the immunizing and skin testing agents which the nurse may administer.
 - (ii) Determine contraindications for the administration of specific immunizing and skin testing agents.
 - (iii) Outline medical principles governing the treatment of possible anaphylactic reactions.
 - (iv) Establish instruction and supervised practice required to insure competency in administering immunizing and skin testing agents.
- (b) Following skin testing, the size of the induration or its absence may be observed and recorded by the properly instructed registered nurse.

Source The provisions of this § 21.16 amended October 22, 1976, effective October 23, 1976, 6 Pa.B. 2677. Immediately preceding text appears at serial page (9692).



49 PA Code, Chapter 21, State Board of Nursing, Subchapter B. Practical Nurses

§ 21.141 Definitions

Practice of practical nursing - The performance of selected nursing acts in the care of the ill, injured or infirm under the direction of a licensed professional nurse, a licensed physician or a licensed dentist which do not require the specialized skill, judgment and knowledge required in professional nursing.

§ 21.145. Functions of the LPN.

- (a) The LPN is prepared to function as a member of the health-care team by exercising sound nursing judgment based on preparation, knowledge, skills, understandings and past experiences in nursing situations. The LPN participates in the planning, implementation and evaluation of nursing care in settings where nursing takes place.
- (b) The LPN administers medication and carries out the therapeutic treatment ordered for the patient in accordance with the following:

(1) The LPN may accept a written order for medication and therapeutic treatment from a practitioner authorized by law and by facility policy to issue orders for medical and therapeutic measures.

(2) The LPN may accept an oral order if the following conditions are met:

- i. The practitioner issuing the oral order is authorized by law and by facility policy to issue oral orders for medical and therapeutic measures.
- ii. The LPN has received instruction and training in accepting an oral order in an approved nursing education program or has received instruction and training in accepting an oral order in accordance with the established policies and protocols of the facility.
- iii. The policy of the facility permits an LPN to accept an oral order.
- iv. The regulations governing the facility permit an LPN to accept an oral order.

(3) The LPN shall question any order which is perceived as unsafe or contraindicated for the patient or which is not clear and shall raise the issue with the ordering practitioner. If the ordering practitioner is not available, the LPN shall raise the issue with a registered nurse or other responsible person in a manner consistent with the protocols or policies of the facility.

(4) The LPN may not accept an oral order which is not within the scope of functions permitted by this section or which the LPN does not understand.

(5) An oral order accepted by the LPN shall be immediately transcribed by the LPN in the proper place on the medical record of the patient. The transcription shall include the prescriber's name, the date, the time of acceptance of the oral order and the full signature of the LPN accepting the oral order. The countersignature of the ordering practitioner shall be obtained in accordance with applicable regulations of the Department of Health governing the licensed facility.

(c) The LPN participates in the development, revision and implementation of policies and procedures designed to insure comfort and safety of patients in collaboration with other health care personnel.

(d) The Board recognizes codes of behavior as developed by appropriate practical nursing associations as the criteria for assuring safe and effective practice.

(e) The LPN may administer immunizing agents and do skin testing only if the following conditions are met:

(1) The LPN has received and satisfactorily completed a Board approved educational program which requires study and supervised clinical practice intended to provide training necessary for administering immunizing agents and for performing skin testings.

(2) A written order has been issued by a licensed physician pertaining to an individual patient or group of patients.

(3) Written policies and procedures under which the LPN may administer immunizing agents and do skin testing have been established by a committee representing the nurses, the physicians and the administration of the agency or institution employing or having jurisdiction over the LPN.

A current copy of the policies and procedures shall be provided to the LPN at least once every 12 months.

The policies and procedures shall provide for:

- (i) Identification of the immunizing and skin testing agents which the LPN may administer.
- (ii) Determination of contraindications for the administration of specific immunizing and skin testing agents.
- (iii) The listing, identification, description and explanation of principles, including technical and clinical indications, necessary for the identification and treatment of possible adverse reactions.
- (iv) Instruction and supervised practice required to insure competency in administering immunizing and skin testing agents.

Authority

The provisions of this § 21.145 amended under section 506 of The Administrative Code of 1929 (71 P. S. § 186); sections 8 and 17.6 of the Practical Nurse Law (63 P. S. § § 658 and 667.6); and section 2.1(k) of the Professional Nursing Law (63 P. S. § 212.1(k)).

Source

The provisions of this § 21.145 amended July 1, 1983, effective July 2, 1983, 13 Pa. B. 2061; amended August 4, 1989, effective August 5, 1989, 19 Pa. B. 3281; amended December 19, 2003, effective December 20, 2003, 33 Pa. B. 6219. Immediately preceding text appears at serial pages (268677) to (268680).

Cross References

This section cited in 49 Pa. Code § 21.414 (relating to interpretations regarding the functions of Licensed Practical Nurses (LPN) - statement of policy).

Sample Medication Administration Consent & Licensed Prescriber Order

(School District Name)

Student Name: _____ Date/Time: _____

School: _____ Teacher/Grade: _____

In accordance with school policy, medication(s) should be given at home before and/or after school. However, when this is not possible, prior to receiving the medication at school, **each student** must provide the school nurse with a *Medication Administration Consent* form signed by the student's parent/guardian and a *Medication Order* from a licensed prescriber. All medications must be in an original prescription bottle/container from a pharmacy.

Parent/Guardian Consent:

I give my permission for my child, _____, to receive the following medication ordered by a licensed prescriber during the school day. I understand that the medications will be given by school health personnel according to my child's licensed prescriber's directions.

Parent/Guardian signature: _____ Date: _____

Parent/Guardian name printed: _____ Phone: _____

.....

Licensed Prescriber Medication Order:

Patient's name: _____ Date: _____

Name of medication: _____

Route and dosage: _____

Time of administration: _____

Directions: _____

Discontinuation date: _____

Allergies: _____

Licensed Prescriber signature: _____

Licensed Prescriber name printed: _____ Phone: _____

Appendix J

Abbreviations and Measurement Equivalent Charts

Abbreviation Chart

ac	before meals	po	by mouth
ad	to, up to	PR	by rectum
AD	right ear	PRN	as needed
ad lib	as desired	qh	every hour
AS	left ear	q2h	every two hours
AU	both ears	q3h	every three hours
BID or bid	twice a day	q4h	every four hours (and so on for any hourly interval)
caps	capsule	qs	quantity sufficient
D5W	5% dextrose in water	R	right
dil	dilute	s	without
elix	elixir	SC or SQ	Subcutaneously
ext	extract	SL	sublingual, under tongue
g, gm	gram	ss	one half
gr	grain	stat	at once
gtt	drop	TID or tid	three times daily
gtts	drops	VO	verbal order
h	hour	>	more than
hs	at bedtime	<	less than
IM	intramuscularly	=	equal to
IV	intravenously	@	at
ID	intradermally		
kg	kilogram		
L	left		
mcg	microgram	<u>ABBREVIATIONS TO AVOID</u>	<u>ABBREVIATIONS TO USE INSTEAD</u>
mEq	milliequivalent	U (unit)	Write “unit”
mg	milligram	Q.D., q.d., Q.O.D., q.o.d.	Write “daily” or “every other day”
ml	milliliter		
NS	normal saline (0.9% sodium chloride)		
1/2NS	0.45% sodium chloride		
O	pint		
OD	right eye		
OS	left eye		
os	mouth		
OTC	over the counter		
OU	each eye		
oz	ounce		

Measurement Equivalents

Metric weight

1 kg (kilogram)	= 1,000 g (grams)
1 g (gram)	= 1,000 mg (milligrams)
1 mg (milligram)	= 1,000 mcg (micrograms)
0.6 g (grams)	= 600 mg (milligrams)
0.3 g (grams)	= 300 mg (milligrams)
0.1 g (grams)	= 100 mg (milligrams)
0.06 g (grams)	= 60 mg (milligrams)
0.03 g (grams)	= 30 mg (milligrams)
0.015 g (grams)	= 15 mg (milligrams)
0.001 g (grams)	= 1 mg (milligram)

Metric volume

1 ts (teaspoon)	= 5 ml (milliliters)
1 tb (tablespoon)	= 3 ts (teaspoon) = 15 ml (milliliters)
1 oz (ounce, fluid)	= 2 tb (tablespoon) = 30-32 ml (milliliters)
1 c (cup)	= 8 oz (ounces, fluid) = 240 ml (milliliters)
1 l or L (liter)	= 1,000 ml (milliliters)
1 pt (pint)	= 473 ml (milliliters)
1 gal (gallon)	= 3,785 ml (milliliters)

Weight conversion

1 oz (ounce)	= 30 g (grams)
1 lb (pound)	= 16 oz (ounces)
1 lb (pound)	= 453.6 g (grams)
2.2 lbs (pounds)	= 1 kg (kilogram)

Approximate equivalents for metric and apothecary measures

grain is equal to a gram

30 mg (0.03 g)	= gr ss (1/2 grain)	150 mg (0.15 g)	= gr iiss
40 mg (0.04 g)	= gr 2/3 (2/3 grain)	200 mg (0.2 g)	= gr iii
50 mg (0.05 g)	= gr 3/4 (3/4 grain)	250 mg (0.25 g)	= gr iv
60 mg (0.06 g)	= gr i (1 grain)	300 mg (0.3 g)	= gr v
75 mg (0.075 g)	= gr 1 1/4 (1 1/4 grain)	400 mg (0.4 g)	= gr vi
100 mg (0.1 g)	= gr iss	500 mg (0.5 g)	= gr viiss
125 mg (0.125 g)	= gr ii	600 mg (0.6 g)	= gr x

Appendix K

Excerpts from the Pennsylvania Controlled Substances, Drugs, Device and Cosmetic Act (P.L. 233, No. 64)

Section 2. Definitions.

(b) As used in this act:

"Practitioner" means: (i) a physician, osteopath, dentist, veterinarian, pharmacist, podiatrist, nurse, scientific investigator, or other person licensed, registered or otherwise permitted to distribute, dispense, conduct research with respect to or to administer a controlled substance, other drug or device in the course of professional practice or research in the Commonwealth of Pennsylvania; (ii) a pharmacy, hospital, clinic or other institution licensed, registered, or otherwise permitted to distribute, dispense, conduct research with respect to or to administer a controlled substance, other drug or device in the course of professional practice or research in the Commonwealth of Pennsylvania.

Section 12. Records of Distribution of Controlled Substances

(b) Every practitioner licensed by law to administer, dispense or distribute controlled substances shall keep a record of all such substances administered, dispensed or distributed by him, showing the amount administered, dispensed or distributed, the date, the name and address of the patient, and in the case of a veterinarian, the name and address of the owners of the animal to whom such substances are dispensed or distributed. Such record shall be kept for two years from the date of administering, dispensing or distributing such substance and shall be open for inspection by the proper authorities.

28 Pa Code, Health and Safety

Chapter 25 Controlled Substances, Drugs, Devices and Cosmetics

§ 25.63. Security controls for practitioners and research personnel.

(a) Controlled substances listed in Schedule I shall be stored in substantially constructed, securely locked cabinets with access restricted to approved personnel.

(b) Controlled substances listed in Schedules II, III, IV and V shall be stored in substantially constructed, securely locked cabinets. However, pharmacies and practitioners as defined in section 2 of the act (35 P. S. § 780.102) may disperse the substances throughout the stocks of non-controlled substances in a manner as to obstruct the theft or diversion of the substances.

Appendix L

Schedule of Controlled Medications

Schedule	Abuse Potential	Use	Comments	Examples of Substances/Medications *
I	High	No accepted medical use in the United States. Substances may be used for research if proper forms are filed.	No accepted standards for safe use.	Heroin, marijuana, LSD, MDMA, peyote, mescaline, psilocybin, Nethylamphetamine, dihydromorphine, methaqualone, tilidine, fenethylline and acetylmethadol
II	High	Specific narcotic, stimulant and depressant substances/medications.	Restricted medical use standards. Must be written and personally <u>signed</u> (no stamp) by a licensed prescriber. Verbal orders only permitted under specific conditions. No refills and bottled prescription must have warning label (Shlafer, 1993).	Opium, morphine, codeine, hydromorphone (Dilaudid), methadone, meperidine (Demerol), cocaine, oxycodone (Percodan), methylphenidate (Ritalin), amobarbital, pentobarbital, sufentanil, etorphine hydrochloride, amphetamine sulfate (Adderall), phenylactone, dextroamphetamine (Dexedrine), dronabinol, secobarbital, and fentanyl
III	Less than those in I and II	Specific narcotic and non-narcotic substances.	Written and verbal orders are acceptable. "May not be refilled more than 5 times or more than 6 months after issued" (Shlafer, 1993).	Glutethimide (Doriden), nalorphine, benzphetamine, chlorphentermine, clortermine, phendimetrazine, paregoric and any preparations containing amobarbital, secobarbital or pentobarbital
IV	Less than those in III		Same as Scheduled III controlled substances.	Barbital, phenobarbital, methyphenobarbital, choral hydrate, meprobamate, paraldehyde, methohexital, fenfluramine, diethylpropion, phentermine, chlordiazepoxide (Librium), diazepam (Valium), (Serax), clorazepate (Tranxene), flurazepam (Dairnane), clonazepam (Clonopin), prazepam (Verstran), alprazolam (Xanax), halazepam (Paxipam), temazepam (Restoril), triazolam (Halcion), lorazepam (Ativan), midazolam (Versed), quazepam, mebutamate, dextropropoxyphene (Darvon), pentazocine (Talwin-NX)
V	Less than IV	Specific antitussive, antidiarrheal and analgesic preparations containing limited quantities of narcotics and stimulants.	Some may be sold without a licensed prescriber's order with restrictions, varies state to state (Shlafer, 1993).	Buprenorphine (Buprenex) and propylhexedrine

* There are specific medications/substances that are federally regulated by the Drug Enforcement Administration. The Controlled Substance Act of 1970 is the legislation that was imposed to regulate the manufacturing, distribution and dispensing of controlled substances. These medications are divided into five schedules. Each schedule is listed above with some examples of medications (list is not all inclusive).

Appendix M

PENNSYLVANIA DEPARTMENT OF HEALTH DISTRICT OFFICES SCHOOL HEALTH CONSULTANT and IMMUNIZATION CONSULTANT CONTACT INFORMATION

NORTHEAST DISTRICT

665 Carey Avenue, Suite 5
Wilkes-Barre PA 18702-1466
Phone – 570-826-2062
Fax – 570-826-2238

COUNTIES

Carbon	Northampton
Lackawanna	Pike
Lehigh	Susquehanna
Luzerne	Wayne
Monroe	Wyoming

SOUTHEAST DISTRICT

Reading State Office Building
625 Cherry Street
Reading PA 19602-1187
Phone – 610-378-4352
Fax – 610-378-4527

COUNTIES

Berks	Lancaster
Bucks	Montgomery
Chester	Philadelphia
Delaware	Schuylkill

NORTHCENTRAL DISTRICT

Water Tower Square, Suite 109
1000 Commerce Park Drive
Williamsport PA 17701
Phone – 570-327-3400
Fax – 570-327-3748

COUNTIES

Bradford	Northumberland
Centre	Potter
Clinton	Snyder
Columbia	Sullivan
Lycoming	Tioga
Montour	Union

SOUTHCENTRAL DISTRICT

30 Kline Plaza
Harrisburg PA 17104
Phone – 717-787-8092
Fax – 717-772-3151

COUNTIES

Adams	Huntingdon
Bedford	Juniata
Blair	Lebanon
Cumberland	Mifflin
Dauphin	Perry
Franklin	York
Fulton	

NORTHWEST DISTRICT

19 McQuiston Drive
Jackson Center PA 16133
Phone – 724-662-6068
Fax – 724-662-6086

COUNTIES

Cameron	Jefferson
Clarion	Lawrence
Clearfield	McKean
Crawford	Mercer
Elk	Venango
Erie	Warren
Forest	

SOUTHWEST DISTRICT

233 West Otterman Street
Greensburg, PA 15601
Phone - 724-830-2701
Fax - 724-832-5237

COUNTIES

Allegheny	Greene
Armstrong	Indiana
Beaver	Somerset
Butler	Washington
Cambria	Westmoreland
Fayette	

Revised 8/25/2008

Appendix N

Standard Precautions

In 1992, The Occupational Safety and Health Administration (OSHA) developed a standard to eliminate or to minimize bloodborne pathogen exposure in the workplace. To date, this standard has provided best practice measures for the handling of potentially infectious materials and guidelines for follow-up of an exposure incident by the employee.

On December 13, 2001 Act 96, the Bloodborne Pathogen Standard Act, was signed into law and went into effect on October 13, 2002. This Act “applies to all employers and employees in the public sector who are not covered by the federal standards of OSHA” (Pennsylvania Department of Health, PA DOH, 2002). This includes public school districts. The Department of Health has provided a document, *The Commonwealth of Pennsylvania Guidelines on Bloodborne Pathogens for the Public Sector*, with the guidelines for the public to implement the state Bloodborne Pathogen Standard. This document is available to download at <http://www.health.state.pa.us/pdf/hpa/epi/bloodpathweb.pdf?healthPNav=#4498>

The following are from *The Commonwealth of Pennsylvania Guidelines on Bloodborne Pathogens for the Public Sector* (PA DOH, 2002):

- Each employer having public employees with occupational exposure shall establish a written Exposure Control Plan.
- Employers shall establish a sharps injury log to assist them in monitoring injuries.
- Engineering controls, such as needle-less systems, shall be utilized after employees receive education on their use.
- Employers shall provide, at no cost to the employee, personal protective equipment.
- Written procedures shall be developed for cleaning and decontamination of equipment and items that are potentially infectious.
- The employer shall make the Hepatitis B vaccination series available to all employees who have occupational exposure.
- Following an exposure incident, the employer shall immediately make available to the employee a confidential medical evaluation, including laboratory tests, and follow-up.
- Employers must provide training and education (at no cost and during work hours) to all employees with occupational exposure.
- Warning labels, including the orange or orange-red biohazard symbol, shall be affixed to containers of regulated waste, refrigerators, freezers, or other containers used to store or transport blood, or other potentially infectious materials.

Hand Hygiene

Procedure:

1. If using soap and water, wet hands first and apply soap (antimicrobial soap preferred).
 2. Vigorously rub hands together for 15 seconds.
 3. Rinse hands with water, dry completely with disposable towel, and use towel to turn off faucet.
- If bar soap is used for handwashing, a soap rack is recommended to facilitate drainage.
 - Multi-use cloth towels are not recommended.
 - If a soap dispenser is used, eliminate bacterial contamination by not adding soap to a partially empty container. Refill when completely empty and container cleaned.
 - Provide staff with alcohol-based hand-rub products as a substitute when antimicrobial soap and water is not easily accessible.
 - Wear gloves whenever there is contact with blood or potentially infectious materials (Center for Disease Control, 2002).

Appendix O

Common Routes of Medication Administration

Ear Instillations

Procedure:

1. Wash hands thoroughly prior to and after the procedure. Follow Standard Precautions. (See Appendix N.)
2. Have student lie with the ear to be treated facing upward.
3. Gently pull the pinna up and back for adults and children over 5 years of age.
4. Instill the prescribed amount of drops on the side of the ear canal.
5. Have student remain in this position for 1-2 min to prevent drops from escaping.
6. Insert loose wick if desired.
7. Document the date, time, medication, dose, route of administration and signature of the licensed personnel administering the medication on the student's medication record.

Eye Instillations

Procedure:

1. Wash hands thoroughly prior to and after the procedure. Follow Standard Precautions. (See Appendix N.)
2. Wipe lids and lashes clean before instillation. Always wipe eyes in the direction from the inner canthus to the outer canthus.
3. Expose the lower conjunctival sac by gently applying pressure downward under lower lashes while student looks upward.
4. Apply the prescribed dose of drops or ointment directly into the conjunctival sac, NOT onto the cornea.
5. Direct the student to close his/her eyelids and move the eye to distribute the medication evenly.
6. Document the date, time, medication, dose, route of administration and signature of the licensed personnel administering the medication on the student's medication record.

Gastrostomy tube

Procedure:

1. Wash hands thoroughly prior to and after the procedure. Follow Standard Precautions. (See Appendix N.)
2. Place all supplies on a clean, dry work area.
The supplies should include: Prescribed medication, 60 ml catheter tipped syringe, plug or clamp, water (warm or room temperature), towel, non-sterile gloves
3. Have student in a sitting position.

4. Draw up 30 ml of water into the catheter tipped syringe.
5. Remove cap or plug from G-tube and insert catheter tipped syringe into the end of the feeding tube and allow water to flow in by gravity.
6. Draw up medication(s) into syringe and administer as ordered. If giving more than one medication always give separately and flush with at least 5 ml of water after each dose.
 - a. Medications should never be added directly into the feeding formula.
 - b. Wait at least 15 min before or after feeding to administer medication(s) depending on the specific medication.
 - c. Since most medications in suspension or elixir are hypertonic, dilute highly concentrated medications in at least 60 ml of water before administering.
 - d. Always check to be certain that medications can be crushed.
 - e. If medication(s) can be crushed, dilute the finely crushed tablets in at least 30 ml of warm water.
 - f. Never crush the beads in a capsule. Open capsule content into water and allow to dissolve.
7. Follow medication administration with an additional 30 ml of water.
8. Document the date, time, medication, dose, route of administration and signature of the licensed personnel administering or observing the medication being taken on the student's medication record.

Inhalers

Metered Dose Inhaler (MDI)

Procedure:

1. Shake inhaler well.
2. Hold inhaler in upright position (mouthpiece at bottom).
3. Have student exhale a normal breath.
4. Have student place mouthpiece in mouth.
5. Have student breathe this inhalation in as deeply as possible. The nurse or student should spray inhaler at beginning of breath so that student inhales medication.
6. Instruct student to hold breath for 5-10 sec.
7. Repeat dose as ordered, with 5 min between puffs.
8. Document the date, time, medication, dose, route of administration and signature of the licensed personnel administering or observing the medication being taken on the student's medication record.

Dry Powder Inhaler (DPI)

A dry powder inhaler does not use chemical propellant to push the medication out of the inhaler. The medication is released by inhaling more rapidly than with a traditional metered-dose inhaler. All dry powder inhalers are breath-actuated.

Procedure:

1. Twist the cover and lift off.
2. Have the student hold the inhaler according to the product directions whenever a dose of medication is being loaded.
3. Twist the inhaler until it clicks.
4. Have the student turn their head away from the inhaler and breathe out. Do not blow or exhale into the inhaler. Do not shake the inhaler after loading it.
5. Have the student, while holding the inhaler in the appropriate position, place the mouthpiece between the lips and inhale deeply and forcefully.
6. If more than one dose is required, repeat steps 2 through 5.
7. Document the date, time, medication, dose, route of administration and signature of the licensed personal administering or observing the medication being taken on the student's medication record.

Diskus

Procedure:

1. Have the student hold the diskus in one hand and put his or her thumb of the other hand on the thumb grip.
2. Slide the diskus open with the thumb until the mouthpiece appears and snaps into position.
3. Hold the diskus in a level, horizontal position with the mouthpiece towards the student. Slide the inner lever until it clicks. The diskus is now ready to use.
4. Have the student turn their head away from the inhaler and breathe out. Do not blow or exhale into the inhaler.
5. Place the mouthpiece between the lips and inhale deeply and forcefully.
6. Remove the diskus and have the student hold their breath for about 10 sec.
7. Breathe out slowly.
8. Close the diskus when finished. Place thumb in the thumb grip and then slide the diskus in the opposite direction from opening it. It will click shut and automatically reset.
9. Have student rinse their mouth with water after treatment is completed. Do not swallow.
10. Document the date, time, medication, dose, route of administration and signature of the licensed personal administering or observing the medication being taken on the student's medication record.

*The above are presently the most commonly used devices. However, methods of delivering asthmatic medications are constantly evolving. Therefore, the CSN should maintain a knowledge base of new devices as they become available. Information can be obtained through primary care providers, pharmaceutical companies and educational offerings.

Injections

Intradermal (ID)

An injection that is administered into the dermis of the skin (i.e. tuberculin skin test).

Procedure:

1. Place all supplies on a clean, dry work area.
The supplies should include: The medication bottle; a 1/ 2" or 5/8", 25 or 27 gauge tuberculin syringe; two alcohol wipes; and a biohazard container or color-coded (red) container for sharps.
2. Wash hands thoroughly prior to and after the procedure. Follow Standard Precautions. (See Appendix N.)
3. Draw up the prescribed amount of medication into the syringe using sterile technique.
4. Check the syringes for air bubbles; if present, expel air bubbles. Recheck the dosage and add more medication if necessary.
5. Recommended sites are the volar surface of the forearm or upper arm.
6. Cleanse site, approximately a 2" area, with alcohol and allow to dry.
7. Using the dominant hand, hold the syringe at a 10-15° angle with the bevel of the needle up. (See diagram at end of subsection on Injections.)
8. Stretch the skin tautly with other hand and then insert the needle so that the bevel is completely covered between the layers of skin.
9. Do not aspirate. A bleb should form as the solution is injected.
10. Quickly withdraw the needle.
11. Do not rub the site. Do not apply a band-aid.
12. Do not attempt to recap needle. Dispose of needle into a designated biohazard container.
13. Document the date, time, medication, dose, route of administration and signature of the licensed personnel administering the medication on the student's medication record.

Intramuscular (IM)

An injection that is administered into the muscle (i.e. DtaP, Td, Hib, Hep B).

Procedure:

1. Place all supplies on a clean, dry work area. The supplies should include: The medication bottle and a 1", 22-23 gauge syringe or prefilled medication syringe; two alcohol wipes; a band-aid and a biohazard container or color-coded (red) container for sharps.
2. Wash hands thoroughly prior to and after the procedure. Follow Standard Precautions. (See Appendix N.)

3. Draw up the prescribed amount of medication into the syringe (unless syringe is prefilled) using sterile technique.
4. Check the syringes for air bubbles; if present, expel air bubbles. Recheck the dosage and add more medication if necessary.
5. Recommended site is the deltoid muscle.
6. Cleanse site, approximately a 2" area, with alcohol and allow to dry.
7. Using the dominant hand, hold the syringe at a 90° angle (perpendicular) and insert the needle with a quick motion at a 90° angle into the muscle. The needle should be all the way into the skin. (See diagram at end of subsection on Injections.)
8. Quickly withdraw the needle.
9. Massage site. There may be blood at the site. If so, with a gloved hand gently cleanse the site with alcohol and pat dry. Apply a band-aid.
10. Do not attempt to recap needle. Dispose of needle into a designated biohazard container.
11. Document the date, time, medication, dose, route of administration and signature of the licensed personnel administering the medication on the student's medication record.

Subcutaneous (SC)

An injection that is administered into the tissue between the skin and muscle (i.e. MMR, IPV, Insulin).

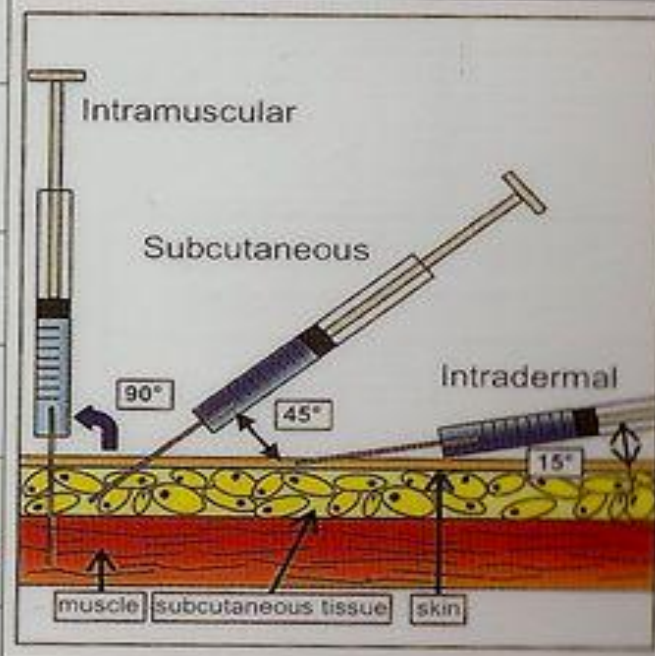
Procedure:

1. Place all supplies on a clean, dry work area. The supplies should include: The medication bottle and a 1/2" or 5/8", 25-27 gauge needle or prefilled medication syringe; two alcohol swabs; band aide; a biohazard container or color-coded (red) container for sharps.
2. Wash hands thoroughly prior to and after the procedure. Follow Standard Precautions. (See Appendix N.)
3. Draw up the prescribed amount of medication into the syringe (unless syringe is prefilled) using sterile technique.
4. Check the syringes for air bubbles; if present, expel air bubbles. Recheck the dosage and add more medication if necessary.
5. "Rotate the injection sites within each body part and use the same body part for the same injection time each day" (Nettina, 2001). For insulin injections it is important to rotate the sites to avoid development of hardened areas under the skin that prevents the medication from being absorbed properly.
6. Rotate the site 1 1/2" from the last injection site.
7. Recommended sites are the lateral upper arms, abdomen, the front and side of the thigh, and the buttocks. Do not inject near scar tissue, joints, groin area, or navel.
8. Check the record for the last injection site, date and time. Select a different site.
9. Cleanse site, approximately a 2" area, with alcohol and allow to dry.

10. At the injection site, using the dominant hand, hold the syringe at a 45-90° angle and pinch a skin fold approximately 2" with the other hand. (See diagram at end of subsection on Injections.) For a thin student: Pinch skin and inject at a 45° angle.
 - a. For a heavier student: Stretch the skin tautly and inject at a 90° angle.
11. Insert the needle with a quick motion at 45-90° angle into the skin. The needle should be inserted into the subcutaneous tissue.
12. Quickly withdraw the needle.
13. Cleanse the site with a gloved hand if blood is visible. Apply a band-aid as necessary.
14. Dispose of needle into a designated biohazard container. Do not attempt to recap needle.
15. Document the date, time, medication, dose, route of administration and signature of the licensed personnel administering the medication on the student's medication record.

Intradermal (ID), Subcutaneous (SC), and Intramuscular (IM)

	ID	SC	IM
Site	Inner forearm, chest, and back	Outer upper arm, anterior thigh, and abdomen	Gluteus, thigh, and deltoid muscles
Gauge and Length	25 g 1/4–3/8"	25–28 g 5/8"	23 g 1–1½"
Angle	10–15°	90° 45° for very thin patients	90°
Volume	0.1–0.2 mL	0.5–1 mL	Up to 3 mL; small muscles (deltoid) no more than 1 mL
IV push is generally 1 mL/min			



Subcutaneous (SC) Heparin Injections

Site	Gauge and Angle	Aspirate	Massage Site
Abdomen, posterior upper arm, low back, thigh, and upper back	25 g–26 g, 3/8" @ 90° (45° if on a thin patient)	No	No

Myers, E. (2004) *LPN Notes: Nurse's Clinical Pocket Guide*. Philadelphia, PA: F.A. Davis Co.

Insulin Pumps

Procedure:

1. Wash hands thoroughly prior to and after the procedure. Follow Standard Precautions. (See Appendix N.)
2. Follow procedure according to insulin pump manufacturer and licensed prescriber.
3. Document the date, time, medication, dose, route of administration and signature of the licensed personnel administering the medication on the student's medication record.

Nasal Instillations

Procedure:

1. Wash hands thoroughly prior to and after the procedure. Follow Standard Precautions. (See Appendix N.) Have student sit or lie with head tilted back.
2. Instill prescribed dose with dropper or spray tip inserted into nare(s) approximately 1/3", have student remain in this position for 1-2 min to prevent drops from escaping.
3. Document the date, time, medication, dose, route of administration and signature of the licensed personnel administering the medication on the student's medication record.

Nasogastric Tube

Procedure:

1. Wash hands thoroughly prior to and after the procedure. Follow Standard Precautions. (See Appendix N.)
2. Check for placement of nasogastric tube by placing a stethoscope over the left upper quadrant of the abdomen area and gently pushing in 5-10 ml of air with a catheter-tipped syringe that is connected to the end of the nasogastric tube. If properly placed, a whooshing/gurgling sound will be heard. Pull back on the syringe to remove air and check for gastric contents. If not in place **do not** administer medication. Nasogastric tube will need to be reinserted as ordered.
3. Insert catheter-tipped syringe into the nasogastric tube.
4. Pour prescribed medication into syringe by gravity, holding syringe approximately 6" above the student's head.
5. After administration of medication pour prescribed amount of water into syringe and flush tubing.
6. Clamp tubing, remove syringe and apply cap to the end of the tubing.
7. Tubing should be securely taped to nose or cheek.
8. Document the date, time, medication, dose, route of administration and signature of the licensed personnel administering the medication on the student's medication record.

Nebulizers

Procedure:

1. Wash hands thoroughly prior to and after the procedure. Follow Standard Precautions. (See Appendix N.)
2. Plug in the machine.
3. Connect the tubing to machine.
4. Fill medication cup with prescribed medication and attach to tubing. Some medications are premixed single-dose vial units, and others may need to be mixed. Check package labeling; some medications must be stored in the refrigerator. Always read and follow directions on medication packaging. If using a multi-dose vial, use a clean plastic syringe to draw the liquid out of the bottle keeping your fingers away to avoid contamination.
5. Have the student place his or her mouthpiece into his or her mouth, or use a facemask. (Note: While the base unit may remain the same, each student should have his or her own mouthpiece or facemask and tubing.)
6. Turn on the machine.
7. Instruct the student to breathe slowly and deeply.
8. Cleanse the nebulizer cup and tubing with water and air dry after treatment.
9. Wash cup with warm soapy water, and then soak for an hour in vinegar and water solution (one part vinegar to two parts water) once a week. Another solution used for disinfecting respiratory equipment is quaternary ammonium compounds (nicknamed “quats”).
10. Change the filter in the nebulizer unit as needed.
11. Replace the nebulizer cup and tubing as required by the manufacturer or as needed.
12. Document the date, time, medication, dose, route of administration and signature of the licensed personnel administering the medication on the student’s medication record.

Oral Medications

Procedure:

1. Wash hands thoroughly prior to and after the procedure. Follow Standard Precautions. (See Appendix N.)
2. Measure liquid medications in appropriate measuring device, such as medication cup, dropper, oral syringe or measuring spoon.
3. Place tablet(s) or capsule(s) into a container for the student.
4. Observe the student swallowing the medication.
5. Document the date, time, medication, dose, route of administration and signature of the licensed personnel administering the medication on the student’s medication record.

Ports

Procedure:

1. Wash hands thoroughly prior to and after the procedure. Follow Standard Precautions. (See Appendix N.)
 2. Follow procedure for medication administration and flushing of the line according to both the student's health care agency and the licensed prescriber.
 - a. There are 4 different types of venous access lines. These include:
 - *Non-tunneled central catheters* – Have one to four lumens, may be inserted right into the femoral, jugular, or subclavian veins and are also known as percutaneous catheters.
 - *Tunneled central catheters* – May be inserted into a central vein such as the subclavian and then subcutaneously tunneled to an exit site approximately 10 cm from the insertion site. Examples of this type of catheter are Hickman™, Broviac™ and the Groshong™.
 - *Central implanted device* – A reservoir (port) implanted under the skin attached to a catheter that is tunneled subcutaneously into a central vein. Examples of this device are Port-A-Cath™, Medi-Port™, Infuse-A-Port™ and Groshong Port™.
 - *Peripherally inserted central catheter (PICC)* – May be inserted into the basilic, brachial or cephalic veins (Nettina, 2001).
- ***Note:** If a central line is placed too deeply an irregular heartbeat may be noted.
3. Document the date, time, medication, dose, route of administration and signature of the licensed personnel administering the medication on the student's medication record.

Rectal Administration

Procedure:

1. Wash hands thoroughly prior to and after the procedure. Follow Standard Precautions. (See Appendix N.)
2. Position student on their side.
3. Gently separate buttocks to expose anus.
4. Insert the lubricated suppository, rectal tube or plastic syringe through the anal opening approximately 1 1/2" to 2" at an angle pointing toward the umbilicus. Gently instill medication.
5. Pinch buttocks together while withdrawing syringe or tube and for 10-15 min following instillation of medication.
6. Encourage the student to not empty bowels for at least 10-15 min to allow maximum absorption of medication.
7. Document the date, time, medication, dose, route of administration and signature of the licensed personnel administering the medication on the student's medication record.

Topical Medications

Procedure:

1. Wash hands thoroughly prior to and after the procedure. Follow Standard Precautions. (See Appendix N.)
2. Wash the affected area well with soap and water and dry thoroughly.
3. Apply the powder, lotion, oil or ointment using gloves and applicator such as gauze pad, q-tip applicator or tongue blade as directed.
4. Document the date, time, medication, dose, route of administration and signature of the licensed personnel administering the medication on the student's medication record.

SAMPLE MEDICATION ADMINISTRATION RECORD

School Year: _____ School/Room: _____

Student: _____ DOB: ____/____/____ Teacher: _____

Licensed Prescriber Name/Phone/Address: _____

_____ Medication Administration Consent signed ____ Yes ____ No

Allergies: _____

1. Date, Medication, Route, Time: _____

2. Date, Medication, Route, Time: _____

3. Date, Medication, Route, Time: _____

Comments: _____

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
AUGUST																															
SEPTEMBER																															
OCTOBER																															
NOVEMBER																															
DECEMBER																															
JANUARY																															
FEBRUARY																															
MARCH																															
APRIL																															
MAY																															
JUNE																															

Initials Name Initials Name CODES

---: Weekend F: Field Trip
 H: Holiday D: Early Dismissal
 A: Absent W: Dose Withheld

Appendix Q

SAMPLE MEDICATION VARIANCE REPORT

(School District Name)

Student Name: _____

Date/Time of Variance: _____

School: _____

Teacher/Grade: _____

Medication Order: _____

Licensed Prescriber: _____ Notified? ____ No ____ Yes

Date/time: _____

Parent(s)/Guardian(s): _____ Notified? ____ No ____ Yes

Date/time: _____

Check all variances that apply.

_____ Possible Adverse Reaction

_____ Incorrect technique

_____ Bottle mislabeled

_____ Medication wasted

_____ Incorrect dose

_____ Student/medication not available

_____ Incorrect medication

_____ Omitted dose(s)

_____ Incorrect student

_____ Outdated medication

_____ Incorrect time

_____ Repeat administration

_____ Incorrect route

_____ Student Refusal

_____ Incorrect transcription

_____ Other: Explain –

Description of

Variance: _____

Student Outcome: _____

Individual preparing report: _____
Date: _____

Certified School Nurse: _____
Date: _____

Signature of Building Administrator: _____
Date: _____

Appendix R

Excerpts from Civil Immunity Statutes Pertaining To Emergency Care

**PENNSYLVANIA CONSOLIDATED STATUTES
TITLE 42. JUDICIARY AND JUDICIAL PROCEDURE
PART VII. CIVIL ACTIONS AND PROCEEDINGS
CHAPTER 83. PARTICULAR RIGHTS AND IMMUNITIES
SUBCHAPTER C. IMMUNITIES GENERALLY**

§ 8331. Medical good Samaritan civil immunity

(a) GENERAL RULE.-- Any physician or any other practitioner of the healing arts or any registered nurse, licensed by any state, who happens by chance upon the scene of an emergency or who arrives on the scene of an emergency by reason of serving on an emergency call panel or similar committee of a county medical society or who is called to the scene of an emergency by the police or other duly constituted officers of a government unit or who is present when an emergency occurs and who, in good faith, renders emergency care at the scene of the emergency, shall not be liable for any civil damages as a result of any acts or omissions by such physician or practitioner or registered nurse in rendering the emergency care, except any acts or omissions intentionally designed to harm or any grossly negligent acts or omissions which result in harm to the person receiving emergency care.

(b) DEFINITION.-- As used in this section "good faith" shall include, but is not limited to, a reasonable opinion that the immediacy of the situation is such that the rendering of care should not be postponed until the patient is hospitalized.

§ 8332. Nonmedical good Samaritan civil immunity

(a) GENERAL RULE.-- Any person who renders emergency care, first aid or rescue at the scene of an emergency, or moves the person receiving such care, first aid and rescue to a hospital or other place of medical care, shall not be liable to such person for any civil damages as a result of any acts or omissions in rendering the emergency care, first aid or rescue, or moving the person receiving the same to a hospital or other place of medical care, except any acts or omissions intentionally designed to harm or any grossly negligent acts or omissions which result in harm to the person receiving the emergency care, first aid or rescue or being moved to a hospital or other place of medical care.

(b) EXCEPTIONS.--

(1) This section shall not relieve a driver of an ambulance or other emergency or rescue vehicle from liability arising from operation or use of such vehicle.

(2) In order for any person to receive the benefit of the exemption from civil liability provided for in subsection (a), he shall be, at the time of rendering the emergency care, first aid or rescue or moving the person receiving emergency care, first aid or rescue to a hospital or other place of medical care, the holder of a current certificate evidencing the successful completion of a course in first aid, advanced life saving or basic life support sponsored by the American National Red Cross or the American Heart Association or an equivalent course of instruction approved by the Department of Health in consultation with a technical committee of the Pennsylvania Emergency Health Services Council and must be performing techniques and employing procedures consistent with the nature and level of the training for which the certificate has been issued.

§ 8337.1. Civil immunity of school officers or employees relating to emergency care, first aid and rescue

(a) GENERAL RULE.-- An officer or employee of a school who in good faith believes that a student needs emergency care, first aid or rescue and who provides such emergency care, first aid or rescue to the student or who removes the student receiving such emergency care, first aid or rescue to a hospital or other place of medical care shall be immune from civil liability as a result of any acts or omissions by the officer or employee, except any acts or omissions intentionally designed to seriously harm or any grossly negligent acts or omissions which result in serious bodily harm to the student receiving emergency care.

(b) DEFINITIONS.-- As used in this section, the following words and phrases shall have the meanings given to them in this subsection:

"Good faith." Includes, but is not limited to, a reasonable nonmedical opinion that the immediacy of the situation is such that the rendering of care should not be postponed.

"Officer or employee of a school." A school director, principal, superintendent, teacher, guidance counselor, support staff member or other educational or medical employee employed in a day or residential school which provides preschool, kindergarten, elementary or secondary education in this Commonwealth at either a public or nonpublic school.

Appendix S

Excerpt from Public School Code of 1949 Pertaining to the Possession and Use of Asthma Inhalers

24 P.S. § 14-1414.1

§ 14-1414.1. Possession and use of asthma inhalers

- (a) Each school entity shall develop a written policy to allow for the possession and self-administration by children of school age of an asthma inhaler and the prescribed medication to be administered thereby in a school setting.
- (b) The policy under this section shall require a child of school age that desires to possess and self-administer an asthma inhaler in a school setting to demonstrate the capability for self-administration and for responsible behavior in the use thereof and to notify the school nurse immediately following each use of an asthma inhaler. The school entity shall develop a system whereby the child may verify to the school nurse that the child is capable of self-administration and has permission for carrying and taking the medication through the use of the asthma inhaler. The school entity shall also restrict the availability of the asthma inhaler and the prescribed medication contained therein from other children of school age, with immediate confiscation of both the asthma inhaler and the medication and loss of privileges if the school policies are abused or ignored.
- (c) The policy under this section may include the following:
- (1) The requirement of a written statement from the physician, certified registered nurse practitioner or physician assistant that provides the name of the drug, the dose, the times when the medication is to be taken and the diagnosis or reason the medicine is needed unless the reason should remain confidential. The physician, certified registered nurse practitioner or physician assistant shall indicate the potential of any serious reaction that may occur to the medication, as well as any necessary emergency response. The physician, certified registered nurse practitioner or physician assistant shall state whether the child is qualified and able to self-administer the medication.
 - (2) The requirement of a written request from the parent or guardian that the school entity comply with the order of the physician, certified registered nurse practitioner or physician assistant. The parent's note shall include a statement relieving the school entity or any school employee of any responsibility for the benefits or consequences of the prescribed medication when it is parent-authorized and acknowledging that the school entity bears no responsibility for ensuring that the medication is taken.
 - (3) The ability of the school entity to reserve the right to require a statement from the physician, certified registered nurse practitioner or physician assistant for the continued use of any medication beyond a specified time period.

(d) As used in this section, "school entity" means a school district, intermediate unit or area vocational-technical school.

HISTORY: Act 2004-187 (H.B. 1113), § 3, approved Nov. 30, 2004, eff. immediately.